State of New Jersey

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Mail Code – 401-02B
Division of Water Quality
Bureau of Surface Water Permitting
P.O. Box 420 – 401 E State St
Trenton, NJ 08625-0420
Phone: (609) 292-4860 / Fax: (609) 984-7938

BOB MARTIN
Commissioner

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
7011 2970 0003 7284 3228
April 20, 2015

JoAnn Mondsini, Executive Director
ROCKAWAY VALLEY RGNL SEWERAGE AUTH
99 GREEN BANK RD - RD 1
BOONTON, NJ 07005

Re: Final Surface Water Renewal Permit Action
Category: A -Sanitary Wastewater
NJPDES Permit No. NJ0022349
ROCKAWAY VALLEY REG SA
Parsippany-Troy Hills, Morris County

Dear Ms. Mondsini:

Enclosed is a **final** New Jersey Pollutant Discharge Elimination System (NJPDES) permit action identified above which has been issued in accordance with N.J.A.C. 7:14A.

A summary of the significant and relevant comments received on the draft action during the public comment period, the Department's responses, and an explanation of any changes from the draft action have been included in the Response to Comments document attached hereto as per N.J.A.C. 7:14A-15.16. Note that the Department has clarified Part IV.D.1 to state that the permittee is only required to amend the Operations and Maintenance Manual.

Any requests for an adjudicatory hearing shall be submitted in writing by certified mail, or by other means which provide verification of the date of delivery to the Department, within 30 days of receipt of this Surface Water Renewal Permit Action in accordance with N.J.A.C. 7:14A-17.2. You may also request a stay of any contested permit condition, which must be justified as per N.J.A.C. 7:14A-17.6 et seq. The adjudicatory hearing request must be accompanied by a completed Adjudicatory Hearing Request Form; the stay request must be accompanied by a completed Stay Request Form. Copies of these forms can be downloaded from the Department's website at http://www.nj.gov/dep/dwq.

As a result of this permit action, your monitoring report forms (MRFs) have been changed and will be mailed to your current MRF recipient. Beginning the effective date of this permit action, please use the new forms. If these revised forms are not received within 2 weeks, please contact the Office of Permit Management at (609) 984-4428 for copies.

For your convenience, a schedule of submittal requirements has been included with this permit package.

Questions or comments regarding the final action should be addressed to Dave Thomas at (609) 292-4860.

Sincerely,

Pilar Patterson, Chief
Bureau of Surface Water Permitting

Enclosures

cc: Permit Distribution List
Masterfile #: 13564; PI #: 46854

FACILITY SUBMITTALS

1. GDR - General Discharge Requirements

Task Description	Actual Due Date
Submit a Complete Permit Renewal Application	01/02/2020

2. A - Sanitary Wastewater

Task Description	Actual Due Date
Submit the written technical evaluation of need to revise local limits	01/01/2016
Submit a chronic whole effluent toxicity test report	01/01/2016
Compliance Schedule Progress Report	01/01/2016
Submit a Beneficial Reuse Annual Report	02/01/2016
CWEA Annual Report	02/01/2016
Submit Grace Period Annual Report	03/01/2016
Compliance Schedule Progress Report	07/01/2016
Compliance Schedule Progress Report	01/01/2017
Submit a Beneficial Reuse Annual Report	02/01/2017
CWEA Annual Report	02/01/2017
Submit Grace Period Annual Report	03/01/2017
Compliance Schedule Progress Report	07/01/2017
Compliance Schedule Progress Report	01/01/2018
Submit a Beneficial Reuse Annual Report	02/01/2018
CWEA Annual Report	02/01/2018
Submit Grace Period Annual Report	03/01/2018
Submit a Beneficial Reuse Annual Report	02/01/2019
CWEA Annual Report	02/01/2019
Submit Grace Period Annual Report	03/01/2019
Submit a Beneficial Reuse Annual Report	02/01/2020
CWEA Annual Report	02/01/2020
Submit Grace Period Annual Report	03/01/2020

Table of Contents

This permit package contains the following items:

1. **Cover Letter**
2. **Facility Submittals**
3. **Table of Contents**
4. **Response to Comments**
5. **NJPDES Permit Authorization Page**
6. **Part I – General Requirements: NJPDES**
7. **Part II – General Requirements: Discharge Categories**
8. **Part III – Limits and Monitoring Requirements**
9. **Part IV – Specific Requirements: Narrative**
10. **Appendix A: Chronic Toxicity Testing Specifications for Use in the NJPDES Permit Program**
11. **Appendix B: Reuse**

New Jersey Department of Environmental Protection
Division of Water Quality
Bureau of Surface Water Permitting

RESPONSE TO COMMENTS

Comments were received on the NJPDES draft Surface Water Renewal Permit Action No. NJ0022349 issued on April 15, 2014. The thirty (30) day public comment period began on April 15, 2014 when the permit was issued. Note that the Public Notice was published in the *Daily Record* on April 11, 2014. The public comment period ended on May 15, 2014. The following person commented during the public comment period:

A. James F. Cosgrove, Jr., P.E. in a letter dated April 30, 2014

A summary of the timely and significant comments received, the New Jersey Department of Environmental Protection's (Department) responses to these comments, and an explanation of any changes from the draft action have been included below:

1. COMMENT: **Stream Low-Flow Statistics**

In the Fact Sheet, on page 1 of 27, the Department provided a MA1CD10 flow of 6.2 cubic feet per second (cfs) and a MA7CD10 flow of 7.3 cfs. These low-flow statistics should not be utilized for this permit. The Jersey City Municipal Utilities Authority (JCMUA) is required to letdown a minimum flow from the Boonton Reservoir of 7 million gallons per day (MGD) (10.8 cfs). Rockaway Valley Regional Sewerage Authority (RVRSA) requests that the low-flow statistics be modified to account for the letdown requirement (as was done with the prior RVRSA NJPDES permit). If the minimum passing flow is not achieved by JCMUA, then the Department should pursue this Water Allocation Permit violation with them rather than penalize RVRSA. We are not aware of any regulatory changes that require the Department to modify its past procedure of utilizing minimum letdown requirements for Water Quality-Based Effluent Limit (WQBEL) calculations. Using the letdown flow rather than the low-flow statistics proposed by the Department, WQBELs would be higher. Given the large impact on RVRSA within the present permit, and perhaps more importantly, the impact that may occur in the future with new effluent limits, RVRSA requests that the Department consider using the letdown flow in calculating WQBELs within this permit.

RESPONSE:

As per the New Jersey Surface Water Quality Standards (SWQS) at N.J.A.C. 7:9B-1.5(c)2, the Department is required to use flows based on the calculated 7Q10 (minimum 7 consecutive day average, once in 10 years) low flow, the 1Q10 low flow (minimum 1-day average, once in 10 years), the 30Q10 flow (minimum 30 consecutive day average, once in 10 years) and 75th percentile flow (flow which is exceeded 75 percent of the time for the appropriate "period of record") as appropriate. While site-specific factors may have resulted in the minimum passing flow not being maintained at all times as described in this comment, the Department is still required to comply with the SWQS which includes using the calculated low flow values from the United States Geological Service (USGS) for all current WQBEL calculations. As such, the Department's application of stream design low flow values to the RVRSA discharge were based on the information provided by Amy McHugh of USGS in an email dated July 16, 2012. In the event that USGS were to revise the low flow values, RVRA may request a

modification to the permit for any parameters that were premised on the 7Q10 effluent limit that are not in effect.

No changes have been made to the final permit as a result of this comment.

2. COMMENT: **E. Coli**

Limits for E. Coli have been established in this permit with only one year provided to RVRSA for compliance. As the Department notes in the Fact Sheet, concentrations above the newly-calculated limits have been reported in the recent past. RVRSA has begun sampling for E. Coli twice per week to obtain additional data on this parameter. Once it has collected one year of data, RVRSA will evaluate the extent of disinfection process changes that will be needed to comply with the new limit. Therefore, we request that the compliance period be extended to three years to achieve compliance with these new limits.

RESPONSE:

The Department first notified the permittee regarding the newly proposed E. coli limitations on August 20, 2013 which is when the preliminary draft permit was issued. This final permit becomes effective July 1, 2015; therefore, the Department maintains that ample notice has been provided. The Department also maintains that available data already demonstrates compliance with the new monthly average limitation. Available E. Coli data as summarized in the draft permit is as follows:

PARAMETER	UNITS	AVERAGING PERIOD	WASTE WATER DATA 7/31/06-6/30/12	EXISTING LIMITS	INITIAL LIMITS	INTERIM LIMITS	FINAL LIMITS	MONITORING	
								Freq.	Sample Type
E. Coli (geometric mean)	# per 100mL	Monthly Avg. Instant Max	44 2300	MR MR	MR MR	126 MR	126 MR	8/ Month	Grab

No changes have been made to the final permit as a result of this comment.

3. COMMENT: **Chronic Whole Effluent Toxicity**

The Department has set a chronic whole effluent toxicity (CWET) limit of 44%. The justification provided by the Department for the need for this limit is that the worst result (62.8% effluent or 1.59 Toxic Units (TU)) is greater than the calculated wasteload allocation of 1.39 TU. RVRSA has monitored for CWET twice per year for many years. Since 2007, RVRSA has reported 15 test results of >100% and one test result of 62.8% (see table below). We do not believe it is appropriate for the Department to be setting an effluent limit for CWET, given the one outlier in the data set. We request that the CWET limit be removed from the permit and the minimum state standard for Acute WET be established at an LC50 of 50%.

Sample Date Start	**CWET Test Result**
April-06	>100%
June-07	>100%
October-07	>100%
April-08	>100%
September-08	>100%

Sample Date Start	CWET Test Result
March-09	>100%
September-09	>100%
February-10	>100%
August-10	>100%
February-11	>100%
July-11	>100%
June-12	62.8%
November-12	>100%
April-13	>100%
October-13	>100%
March-14	>100%

RESPONSE:

As stated in the draft permit, 40 CFR 122.44(d) and N.J.A.C. 7:14A-13.6(a) require that where the Department determines, using site-specific WET data, that a discharge causes, shows a reasonable potential to cause, or contributes to an excursion above the SWQS, the permitting authority must establish effluent limits for WET. Although the Department agrees that there was only one test result less than 100%, documentation to invalidate this test has not been submitted. As a result, the Department is bound to utilize the test in its WQBEL calculation.

Nonetheless, Part IV.G.3 of the permit states "The Department will consider proposing to remove or modify a toxic pollutant's newly imposed final effluent limitation from the permit if additional effluent data (minimum of 2.5 consecutive years of monthly data) is submitted, and it substantiates the request." The Department uses a minimum of 10 data points in a WET WQBEL analysis where the Department notes that the result from September 2014 was also >100%. Should the permittee elect to conduct additional sampling or when 10 data points show >100%, a request to modify the permit may be submitted.

No changes have been made to the final permit as a result of this comment.

4. COMMENT: **Total Toxic Organics**

In the Fact Sheet, on page 15 of 27, the Department has defined Total Toxic Organics (TTO) to be the sum of Phenol, Toluene, and Chloroform, since these parameters were the only parameters detected in RVRSA's effluent from a long list of pollutants identified in 40 CFR 433.11. **However, 40 CFR 433.11 states that only results that are greater than 10 µg/L should be utilized in calculating TTO.** None of the effluent concentrations for Phenol, Toluene, and Chloroform exceed 10 µg/L. Therefore, we do not believe it is appropriate to set TTO limits and request that the TTO limits be removed from the permit. Furthermore, setting TTO limits is contrary to the prior settlement agreement with the Department, where the Department agreed that TTO limits were not necessary.

In any event, even if TTO limits are established, we have noted two minor errors in the Fact Sheet on page 15 of 27, regarding the calculation of MDLs for Toluene and Chloroform. The correct MDL for Toluene is 2.94 mg/l (not 2.49 mg/l) and for Chloroform is 0.154 mg/l (not 0.166 mg/l). This results in a calculated TTO WQBEL of 25.98 mg/l (not 25.544 mg/l).

RESPONSE:

The Department has conducted further review of the effluent monitoring data results for the period of 2010 to 2013 submitted by the RVRSA's Industrial Pretreatment Program in e-mail transmittals dated December 27, 2012, January 7, 2013, and June 10, 2014. This review has revealed that only one of the regulated TTO parameters under the metal finishing regulations (40 CFR 433.11), Phenol, was found in quantifiable values above 10 µg/l in an industrial user's wastewater discharge to the RVRSA treatment works. Thus, the Phenol parameter shall be considered for the evaluation of the application of a TTO effluent limitation pursuant to N.J.A.C. 7:14A-6.16(a). However, the TTO parameters, Toluene and Chloroform were not individually found in quantifiable values above 10 µg/L in the industrial user (IU) discharge. As a result, Toluene and Chloroform are not subject to the requirement of N.J.A.C. 7:14-6.16(a) in conjunction with CWEA N.J.S.A. 58:10A-7, for RVRSA's effluent limitations.

The Department is required to re-evaluate TTO upon every permit renewal action and calculate a TTO limit, when any of the applicable parameters is found in concentrations exceeding 10 µg/L in the industrial user's wastewater discharge to RVRSA treatment works and is quantified in RVRSA's effluent. Based on this, the Department has determined that the TTO limitation shall consist of only Phenol. So, the Department has accordingly, made the changes in the Fact Sheet and Administrative Record regarding the TTO calculation.

Sections, B.14 (page 12 of 27) and B.15 (15 of 27) of the Fact Sheet are hereby clarified for the purposes of the Administrative Record where Toluene and Chloroform parameters are now removed. Part III, Tables III-A-1, III-A-2, and III-A-3, as included in the draft RVRSA NJPDES/DSW permit, are modified to remove the Toluene and Chloroform parameters from TTO. Regarding the TTO parameter Phenol which is regulated under the metal finishing regulations at 40 CFR 433, Part III (pages 5, 9 and 13 of 32) has been corrected to read "TTO (40 CFR 433)" in place of "TTO (40 CFR 413)".

The Department is aware of the prior settlement agreement that made the determination to remove the final effluent limitations for TTO because applicable parameters to IUs subject to the Metal finishing Regulations (40 CFR 433.11) were not found in quantifiable values above 10 µg/L in the IU's effluent. Therefore, the regulation of TTO under the Pretreatment requirements for local agencies provisions of N.J.A.C. 7:14-6.16(a) in conjunction with CWEA N.J.S.A. 58:10A-7 were no longer applicable.

This change affects Part III of the final permit.

5. COMMENT: **Capacity Assurance Trigger**

In Part IV, page 4 of 17, we request that Section E.1.f be revised to be consistent with other recent permits issued by the Department, which state, "When three (3) consecutive 12-month rolling average values of committed flow reaches or exceeds 80% of 12 MGD, the permittee shall:" Given the variability in seasonal flows at RVRSA, a 3-month average is not an appropriate averaging period to determine when to trigger the capacity assurance program.

RESPONSE:

The Department agrees that the language as included in the draft permit is not consistent with other NJPDES Permit and has hereby incorporated the following change to the final permit.

"f. When an average of three (3) consecutive rolling monthly average values of the committed flow (actual flow- and approved allocated flow) reaches or exceeds 80% of 12 MGD (the permitted capacity of the facility), the permittee shall:

i. Develop a Capacity Assurance Program (CAP) in accordance with N.J.A.C. 7:14A-22.16.

ii. For more information concerning the CAP, please contact the Bureau of Engineering and Construction Permitting North at (609) 292-6894.

iii. Contact the Division of Watershed Management to discuss whether an amendment to the Water Quality Management Plan (WQMP) or Wastewater Management Plan (WMP) will be necessary."

Note that this language somewhat differs from the language suggested in this comment but is consistent with other NJPDES permits.

This change affects Part IV.E.1.f of the final permit.

6. COMMENT: **Phosphorus**

The Department has set a year-round monthly average phosphorus limit of 0.76 mg/l, based on the TMDL study recently completed. As the Department is aware, several dischargers have appealed the Department's adoption of the TMDL to the Appellate Division, I/M/O Adoption of Amendments to the Northeast, Upper Raritan, Sussex County and Upper Delaware Water Quality Management Plans, Docket Number A-005266-07T3 (Consolidated). The basis for the appeal is the Department's determination to impose the limitations year round, including during periods when there would be no benefit to the environment, as opposed to seasonally with advance notice in the winter months when phosphorus control is actually warranted. The Appellate Division determined that there did not exist a sufficient basis in the Administrative Record upon which the Department could conclude that conditional seasonal effluent limitations were institutionally impracticable and remanded the matter to the administrative courts for hearing.

The Appellate Division retained jurisdiction over this matter upon the completion of the remand where a hearing was held relevant to the issue of seasonal phosphorus effluent limitations. On May 20, 2011, an Initial Decision was rendered by the Honorable Gail Cookson, ALJ, Office of Administrative Law, in IMO Adoption of Amendments to the Northeast, Upper Raritan, Sussex County and Upper Delaware Water Quality Management Plans, OAL Docket Number ELUWN 09560-2009N, which found in favor of conditional seasonal effluent limitations. In her initial decision, ALJ Cookson held that it is arbitrary, capricious and unreasonable for the Department the Department to require that sewage treatment plant operators in the Passaic River Basin carry out year-round treatment for phosphorous discharged into local waters that may, or may not, be pumped into the Wanaque South Reservoir during the winter. The judge specifically found that "year-round treatment of phosphorous will result in a waste of public resources in the form of unnecessary chemicals being imparted into the Passaic River and additional sludge being produced, handled and disposed." She further held that year-round treatment was akin to "treating an environmental problem that does not need treating." The Department's Commissioner issued his Final Decision on June 26, 2012, rejecting the findings of the Administrative Law Court, and the matter is currently pending before the Appellate Division. Briefs have been filed, and oral argument was held on March 5, 2014. Given the significant economic constraints facing the State and the members of the RVRSA, and for all of the legal and technical reasons advanced in the context of the above-referenced litigation, we request that at this time, the phosphorus limits be removed from the permit until the

Department issues its planned mass modification of all impacted NJPDES permits within the Passaic Basin. Alternatively, the the Department should remove the phosphorus limitation in the winter season (November – April) until a final decision is rendered by the Appellate Division.

In addition, the Department has provided only three years for RVRSA to obtain compliance with the 0.76 mg/l limit. The Department should be reminded that many years ago RVRSA voluntarily initiated on/off aeration, which achieves phosphorus removal biologically to the benefit of the environment. The additional time to achieve compliance is needed in part to determine an appropriate method to remove phosphorus chemically while maintaining the biological operation. In order to achieve greater removal rates, the following tasks will be required:

1. Design and build filtration facility;
2. Conduct bench and field tests on chemical agents;
3. Test chemical agents over at least two (2) years of changing seasons to determine effectiveness in high flow/low flow, temperature changes, pH and TSS impact;
4. Depending on the chemical agent, may need to design and build facility for neutralization of effluent prior to discharge. For example, alum is acidic and requires use of lime or other caustic to keep pH in proper range for process sludge and effluent in compliance with permit limit for pH.

All the above cannot be accomplished in three years. Given the size and complexity of its plant, RVRSA requests that it be provided five years to pilot test, design, and construct facilities to achieve compliance.

RESPONSE:

Regarding the first issue noted in this comment, the Department acknowledges that the applicability of seasonal limits is a litigation matter. On April 24, 2008, the Department adopted amendments to the Northeast, Upper Raritan, Sussex County, and Upper Delaware WQMPs establishing TMDL limits for phosphorus in the Passaic River Basin, see 40 N.J.R. 2574(b), which the EPA approved on July 31, 2008**.** Some dischargers to the Passaic River Basin appealed the Department's adoption of these amendments, arguing that the Department improperly imposed these TMDL limits year round. Petitioners argued that they should be required to comply with the TMDL only on a seasonal basis (May through October) and during any other period during which North Jersey will be pumping water from the Passaic River into the Wanaque Reservoir. The Department rejected Petitioners' proposed seasonal limits when it adopted the TMDL, finding that seasonal limits would be "institutionally impracticable" see 40 N.J.R. 2592. In a decision dated July 21, 2009, the Appellate Division upheld the validity of the TMDL but found insufficient evidence in the Administrative Record to support the Department's finding of institutional impracticability. The court remanded the case for an evidentiary hearing in the Office of Administrative Law (OAL) "to determine the appropriateness of seasonal limits upon the phosphorus content of discharges into the Passaic River upstream of the Wanaque Reservoir diversion point." On May 20, 2011, the Administrative Law Judge found, in her Initial Decision, that seasonal limits can be implemented by the Department. On June 6, 2012, Bob Martin, Commissioner, New Jersey Department of Environmental Protection, rendered a final decision in this matter (OAL DKT # ELU 09560-09) rejecting the Initial Decision in part, and adopting it in part. Specifically, he found that that the "evidence developed on remand conclusively demonstrates that seasonal limits are institutionally impracticable." The Commissioner's final decision was appealed.

Subsequent to the issuance of the draft permit on April 15, 2014, the Appellate Division issued its decision in I/M/O Adoption of Amendments to the Northeast, Upper Raritan, Sussex County and Upper

Delaware Water Quality Management Plans, N.J. Super. (App. Div. 2014) On May 15, 2014. The court affirmed the Commissioner's determination that the off-season, as needed treatment program advocated by the petitioners, including this commenter, is "institutionally impracticable." The Appellate Division decision supports the imposition of year-round phosphorus treatment. Therefore, the year-round limits included in this permit are appropriate and lawful.

The Department has determined that issuance of NJPDES permit actions that implement the WLAs identified in the adopted TMDL to address water quality impairments in the Passaic River Basin need to proceed without further delay. Regarding other facilities within the TMDL are described, the Department has already issued permits to many of the affected dischargers with a 3 year compliance schedule. The Department is actively working towards issuance of renewed permits for the remaining affected facilities.

Regarding the request for additional time, there was an extensive public process associated with the WQMP and there permittee was made aware of the phosphorus requirements during that process. During the deliberation of the Passaic Phosphorus TMDL, the permittee advised the Department that they will meet the limits through chemical addition. Nevertheless, this permit allows a period of 36 months from the effective date of the permit (EDP) for the same purpose which the Department maintains is sufficient.

Please note that consistent with the April 24, 2008 adopted TMDL referenced in this comment, the phosphorus requirements are established based on long term average concentrations only effluent limits. As a result, the requirements included in the draft permit pertaining to monitoring and reporting of raw influent Phosphorus concentrations in mg/l as well as reporting of effluent phosphorous loadings in kg/day have been removed from Part III of the final permit.

This change affects Part III of the final permit.

7. COMMENT: **Miscellaneous Issues**

In the Fact Sheet, page 2 of 27, section 4 provides the facility process units which should be modified as follows:

1. Junction Chamber
2. Siphon Cleanout Chamber
3. Influent Distribution Box
4. Mechanical Bar Screens
5. Grit Removal System
6. Distribution Box A
7. Oxidation Channels
8. Distribution Box B
9. Final Clarifiers
10. Chloramination Process
11. Chlorination/dechlorination Unit
12. Post Aeration (Cascade Steps) Unit

In the Fact Sheet, page 10 of 27, section 11, the last paragraph that begins with "The existing winter season limit of 10.9 mg/l" appears to be a carry-over from a previous version of the Fact Sheet. We suggest that this paragraph be deleted.

Effluent flow monitoring is required in this permit. RVRSA requests that the permit clarify that effluent flow is determined by utilizing two flow meters. After the "effluent" meter, RVRSA withdraws effluent for service water within the plant. Therefore, to most accurately calculate effluent flow discharged to the Rockaway River, RVRSA subtracts the flow measured by the service water meter from the "effluent" meter.

RESPONSE:

Section 4 of the Fact Sheet is hereby updated as follows for the purposes of the Administrative Record:

"1. Junction Chamber
2. Siphon Cleanout Chamber
3. Influent Distribution Box
4. Mechanical Bar Screens ~~Coarse Bar Racks~~
5. Grit Removal System ~~Aerated Grit Chambers~~
6. Distribution Box A
7. Oxidation Channels
8. Distribution Box B
9. Final Clarifiers
10. Chloramination Process
11. Chlorination/dechlorination Unit
12. Post Aeration (Cascade Steps) Unit"

Regarding the second comment, the commenter is correct in that sentence is an error. For the purposes of the Administrative Record, this paragraph as included in Section 11 on page 10 of 27 of the Fact Sheet is hereby modified as follows:

> "~~The existing winter season limit of 10.9 mg/L as a daily maximum will adequately protect against the instream toxic effects of ammonia during the winter non-spawning and winter spawning season months.~~ Therefore, the existing winter season Daily maximum concentration effluent limitations, associated with the months of November through April, have been retained in this permit action based on the antibacksliding provisions of N.J.A.C. 7:14A-13.19 and the antidegradation policies at N.J.A.C. 7:9B-1.5(d)."

As requested by the commenter, the Department agrees that the permittee can continue to utilize two flow meters to report their actual effluent flow on Discharge Monitoring Report (DMR) forms where service water shall be considered. The sample type for Part III has been changed to "Metered" and Part IV.A.1.i has been modified in the final permit as follows:

> " Effluent Flow shall be measured by utilizing two flow meters. The permittee shall subtract the Flow measured by the service meter from the effluent meter in order to calculate the flow discharged to the Rockaway River. ~~Flow shall be measured using Flow meter.~~

However, RVRSA's treated effluent volume used in the implementation of a RWBR program/ withdrawn for service water within the plant at the facility will not be allowed to be used as a basis for the facility to expand its sewer service area or capacity or as a basis to accept additional wastewater pursuant to N.J.A.C. 7:14-2:15.

This change affects Part III and IV of the final permit.

NEW JERSEY POLLUTANT DISCHARGE ELIMINATION SYSTEM

The New Jersey Department of Environmental Protection hereby grants you a NJPDES permit for the facility/activity named in this document. This permit is the regulatory mechanism used by the Department to help ensure your discharge will not harm the environment. By complying with the terms and conditions specified, you are assuming an important role in protecting New Jersey's valuable water resources. Your acceptance of this permit is an agreement to conform with all of its provisions when constructing, installing, modifying, or operating any facility for the collection, treatment, or discharge of pollutants to waters of the state. If you have any questions about this document, please feel free to contact the Department representative listed in the permit cover letter. Your cooperation in helping us protect and safeguard our state's environment is appreciated.

Permit Number: NJ0022349

Final: Surface Water Renewal Permit Action

Permittee:
Rockaway Valley Regional Sewerage Authority
99 Green Bank Road - Rd 1
Boonton, NJ 07005

Co-Permittee:

Property Owner:
Rockaway Valley Regional Sewerage Authority
99 Green Bank Road - Rd 1
Boonton, NJ 07005

Location Of Activity:
Rockaway Valley Regional Sewerage Authority
99 Green Bank Road - Rd 1
Parsippany-Troy Hills Township, Morris County

Authorization(s) Covered Under This Approval	Issuance Date	Effective Date	Expiration Date
A -Sanitary Wastewater	04/20/2015	07/01/2015	06/30/2020

By Authority of:
Commissioner's Office

DEP AUTHORIZATION
Pilar Patterson, Chief
Bureau of Surface Water Permitting
Water Pollution Management Element
Division of Water Quality

(Terms, conditions and provisions attached hereto)

PART I
GENERAL REQUIREMENTS:
NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.

b. General Conditions

Penalties for Violations	N.J.A.C. 7:14-8.1 et seq.
Incorporation by Reference	N.J.A.C. 7:14A-2.3
Toxic Pollutants	N.J.A.C. 7:14A-6.2(a)4i
Duty to Comply	N.J.A.C. 7:14A-6.2(a)1 & 4
Duty to Mitigate	N.J.A.C. 7:14A-6.2(a)5 & 11
Inspection and Entry	N.J.A.C. 7:14A-2.11(e)
Enforcement Action	N.J.A.C. 7:14A-2.9
Duty to Reapply	N.J.A.C. 7:14A-4.2(e)3
Signatory Requirements for Applications and Reports	N.J.A.C. 7:14A-4.9
Effect of Permit/Other Laws	N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
Severability	N.J.A.C. 7:14A-2.2
Administrative Continuation of Permits	N.J.A.C. 7:14A-2.8
Permit Actions	N.J.A.C. 7:14A-2.7(c)
Reopener Clause	N.J.A.C. 7:14A-6.2(a)10
Permit Duration and Renewal	N.J.A.C. 7:14A-2.7(a) & (b)
Consolidation of Permit Process	N.J.A.C. 7:14A-15.5
Confidentiality	N.J.A.C. 7:14A-18.2 & 2.11(g)
Fee Schedule	N.J.A.C. 7:14A-3.1
Treatment Works Approval	N.J.A.C. 7:14A-22 & 23

c. Operation And Maintenance

Need to Halt or Reduce not a Defense	N.J.A.C. 7:14A-2.9(b)
Proper Operation and Maintenance	N.J.A.C. 7:14A-6.12

d. Monitoring And Records

Monitoring	N.J.A.C. 7:14A-6.5
Recordkeeping	N.J.A.C. 7:14A-6.6
Signatory Requirements for Monitoring Reports	N.J.A.C. 7:14A-6.9

e. Reporting Requirements

Planned Changes	N.J.A.C. 7:14A-6.7
Reporting of Monitoring Results	N.J.A.C. 7:14A-6.8
Noncompliance Reporting	N.J.A.C. 7:14A-6.10 & 6.8(h)
Hotline/Two Hour & Twenty-four Hour Reporting	N.J.A.C. 7:14A-6.10(c) & (d)
Written Reporting	N.J.A.C. 7:14A-6.10(e) &(f) & 6.8(h)
Duty to Provide Information	N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
Schedules of Compliance	N.J.A.C. 7:14A-6.4
Transfer	N.J.A.C. 7:14A-6.2(a)8 & 16.2

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

a. In addition to conditions in Part I of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations which are in effect as of the effective date of the final permit.

i. Surface Water Quality Standards N.J.A.C. 7:9B-1

ii. Water Quality Management Planning Regulations N.J.A.C. 7:15

B. General Conditions

1. Scope

a. The issuance of this permit shall not be considered as a waiver of any applicable federal, state, and local rules, regulations and ordinances.

2. Permit Renewal Requirement

a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.

b. Submit a complete permit renewal application: 180 days before the Expiration Date.

3. Notification of Non-Compliance

a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C. 7:14A-6.10 by contacting the DEP HOTLINE at 1-877-WARNDEP (1-877-927-6337).

b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five days.

4. Notification of Changes

a. The permittee shall give written notification to the Department of any planned physical or operational alterations or additions to the permitted facility when the alteration is expected to result in a significant change in the permittee's discharge and/or residuals use or disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.

b. Prior to any change in ownership, the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to the notification of change in ownership.

5. Access to Information

a. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter upon a person's premises, for purposes of inspection, and to access / copy any records that must be kept under the conditions of this permit.

6. Operator Certification

a. Pursuant to N.J.A.C. 7:10A-1.1 et seq. every wastewater system not exempt pursuant to N.J.A.C. 7:10A-1.1(b) requires a licensed operator. The operator of a system shall meet the Department's requirements pursuant to N.J.A.C. 7:10A-1.1 and any amendments. The name of the proposed operator, where required shall be submitted to the Department at the address below, in order that his/her qualifications may be determined prior to initiating operation of the treatment works.

i. Notifications shall be submitted to:
NJDEP
Examination and Licensing Unit
P.O. Box 417
Trenton, New Jersey 08625
(609)777-1012.

b. The permittee shall notify the Department of any changes in licensed operator within two weeks of the change.

7. Operation Restrictions

a. The operation of a waste treatment or disposal facility shall at no time create: (a) a discharge, except as authorized by the Department in the manner and location specified in Part III of this permit; (b) any discharge to the waters of the state or any standing or ponded condtion for water or waste, except as specifically authorized by a valid NJPDES permit.

PART III
LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
001A Sanitary Outfall	Rockaway River	FW2-NT(C2)	A - Sanitary Wastewater

Location Description

The permittee is authorized to discharge treated sanitary wastewater into the receiving stream identified above at a latitude of 40d, 53m, 50s and a longitude of 74d, 23m, 30s.

The influent monitoring location shall be before any treatment, other than degritting, and before the addition of any internal waste streams. The effluent monitoring location for all parameters shall be post dechlorination and after cascade aeration prior to the discharge into the receiving stream.

Contributing Waste Types

Sanitary

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: 1Initial **PHASE Start Date:** 07/01/2015 **PHASE End Date:** 06/30/2016

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
pH	Raw Sew/influent	*****	*****	*****	REPORT Instant Minimum	*****	REPORT Instant Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Instant Minimum	*****	9.0 Instant Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: 1Initial **PHASE Start Date:** 07/01/2015 **PHASE End Date:** 06/30/2016

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Solids, Total Suspended	Effluent Gross Value	1360 Monthly Average	2000 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	2/Week	Calculated
January thru December	QL	***	***		***	***	***			
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Instant Maximum	MG/L	2/Month	Grab
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	82 Monthly Average	150 Daily Maximum	KG/DAY	*****	1.8 Monthly Average	3.3 Daily Maximum	MG/L	3/Week	24 Hour Composite
May thru October	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	273 Monthly Average	495 Daily Maximum	KG/DAY	*****	6.0 Monthly Average	10.9 Daily Maximum	MG/L	3/Week	24 Hour Composite
November thru April	QL	***	***		***	***	***			
Nitrogen, Nitrate Total (as N)	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	MG/L	1/Quarter	24 Hour Composite
January thru December	QL	***	***		***	***	***			
E. Coli	Effluent Gross Value	*****	*****	*****	*****	REPORT Monthly Average	REPORT Instant Maximum	#/100ML	8/Month	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: 1Initial **PHASE Start Date:** 07/01/2015 **PHASE End Date:** 06/30/2016

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Coliform, Fecal General	Effluent Gross Value	*****	*****	*****	*****	200 Monthly Geo Avg	400 Weekly Geometric	#/100ML	8/Month	Grab
January thru December	QL	***	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Effluent Gross Value	363 Monthly Average	545 Weekly Average	KG/DAY	*****	8 Monthly Average	12 Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	2/Week	Calculated
January thru December	QL	***	***		***	***	***			
LC50 Stat 48hr Acu Ceriodaphnia	Effluent Gross Value	*****	*****	*****	50 Report Per Minimum	*****	*****	%EFFL	1/6 Months	Composite
January thru December	QL	***	***		***	***	***			
IC25 Statre 7day Chr Ceriodaphnia	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	*****	*****	%EFFL	1/6 Months	Composite
January thru December	QL	***	***		***	***	***			
Chlorine Produced Oxidants	Effluent Gross Value	0.470 Monthly Average	1.14 Daily Maximum	KG/DAY	*****	0.01 Monthly Average	0.025 Daily Maximum	MG/L	2/Day	Grab
January thru December	RQL	4.5	4.5		***	0.1	0.1			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: 1Initial **PHASE Start Date:** 07/01/2015 **PHASE End Date:** 06/30/2016

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Temperature, oC	Raw Sew/influent	*****	*****	*****	REPORT Instant Minimum	REPORT Monthly Average	REPORT Instant Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	REPORT Instant Minimum	REPORT Monthly Average	REPORT Instant Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Oxygen, Dissolved (DO)	Effluent Gross Value	*****	*****	*****	6 Weekly Av Minimum	REPORT Daily Avg Minimum	*****	MG/L	3/Week	Grab
January thru December	QL	***	***		***	***	***			
Phosphorus, Total (as P)	Effluent Gross Value	*****	*****	*****	*****	3.4 Monthly Average	REPORT Weekly Average	MG/L	4/Month	24 Hour Composite
May thru October	QL	***	***		***	***	***			
Phosphorus, Total (as P)	Effluent Gross Value	*****	*****	*****	*****	3.2 Monthly Average	REPORT Weekly Average	MG/L	4/Month	24 Hour Composite
November thru April	QL	***	***		***	***	***			
Nickel, Total Recoverable	Effluent Gross Value	3817.6 Monthly Average	5310.2 Daily Maximum	GR/DAY	*****	84.0 Monthly Average	116.9 Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	***	***		***	10	10			
Zinc, Total Recoverable	Effluent Gross Value	7807.4 Monthly Average	9951.2 Daily Maximum	GR/DAY	*****	171.8 Monthly Average	219.1 Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	***	***		***	30	30			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 1: Surface Water DMR Limits and Monitoring Requirements

PHASE: 1Initial **PHASE Start Date:** 07/01/2015 **PHASE End Date:** 06/30/2016

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Copper, Total Recoverable	Effluent Gross Value	2467.3 Monthly Average	3288.8 Daily Maximum	GR/DAY	*****	54.3 Monthly Average	72.4 Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	***	***		***	10	10			
Total Toxic Organics (TTO) (40 CFR 433)	Effluent Gross Value	632.8 Monthly Average	1039.4 Daily Maximum	KG/DAY	*****	13.9 Monthly Average	22.8 Daily Maximum	MG/L	1/Month	Grab
January thru December	RQL	***	***		***	***	***			

Table III - A - 2: Surface Water DMR Limits and Monitoring Requirements

PHASE: 2-Interim **PHASE Start Date:** 07/01/2016 **PHASE End Date:** 06/30/2017

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
pH	Raw Sew/influent	*****	*****	*****	REPORT Instant Minimum	*****	REPORT Instant Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Instant Minimum	*****	9.0 Instant Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 2: Surface Water DMR Limits and Monitoring Requirements

PHASE: 2-Interim **PHASE Start Date:** 07/01/2016 **PHASE End Date:** 06/30/2017

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Solids, Total Suspended	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	1360 Monthly Average	2000 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	2/Week	Calculated
January thru December	QL	***	***		***	***	***			
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Instant Maximum	MG/L	2/Month	Grab
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	82 Monthly Average	150 Daily Maximum	KG/DAY	*****	1.8 Monthly Average	3.3 Daily Maximum	MG/L	3/Week	24 Hour Composite
May thru October	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	273 Monthly Average	495 Daily Maximum	KG/DAY	*****	6.0 Monthly Average	10.9 Daily Maximum	MG/L	3/Week	24 Hour Composite
November thru April	QL	***	***		***	***	***			
Nitrogen, Nitrate Total (as N)	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	MG/L	1/Quarter	24 Hour Composite
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 2: Surface Water DMR Limits and Monitoring Requirements

PHASE: 2-Interim **PHASE Start Date:** 07/01/2016 **PHASE End Date:** 06/30/2017

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
E. Coli	Effluent Gross Value	*****	*****	*****	*****	126 Monthly Geo Avg	REPORT Instant Maximum	#/100ML	8/Month	Grab
January thru December	QL	***	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Effluent Gross Value	363 Monthly Average	545 Weekly Average	KG/DAY	*****	8 Monthly Average	12 Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	2/Week	Calculated
January thru December	QL	***	***		***	***	***			
LC50 Stat 48hr Acu Ceriodaphnia	Effluent Gross Value	*****	*****	*****	50 Report Per Minimum	*****	*****	%EFFL	1/6 Months	Composite
January thru December	QL	***	***		***	***	***			
IC25 Statre 7day Chr Ceriodaphnia	Effluent Gross Value	*****	*****	*****	REPORT Report Per Minimum	*****	*****	%EFFL	1/6 Months	Composite
January thru December	QL	***	***		***	***	***			
Chlorine Produced Oxidants	Effluent Gross Value	0.470 Monthly Average	1.14 Daily Maximum	KG/DAY	*****	0.01 Monthly Average	0.025 Daily Maximum	MG/L	2/Day	Grab
January thru December	RQL	4.5	4.5		***	0.1	0.1			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 2: Surface Water DMR Limits and Monitoring Requirements

PHASE: 2-Interim **PHASE Start Date:** 07/01/2016 **PHASE End Date:** 06/30/2017

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Temperature, oC	Raw Sew/influent	*****	*****	*****	REPORT Instant Minimum	REPORT Monthly Average	REPORT Instant Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Temperature, oC	Effluent Gross Value	*****	*****	*****	REPORT Instant Minimum	REPORT Monthly Average	REPORT Instant Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Oxygen, Dissolved (DO)	Effluent Gross Value	*****	*****	*****	6 Weekly Av Minimum	REPORT Daily Avg Minimum	*****	MG/L	3/Week	Grab
January thru December	QL	***	***		***	***	***			
Phosphorus, Total (as P)	Effluent Gross Value	*****	*****	*****	*****	3.4 Monthly Average	REPORT Weekly Average	MG/L	4/Month	24 Hour Composite
May thru October	QL	***	***		***	***	***			
Phosphorus, Total (as P)	Effluent Gross Value	*****	*****	*****	*****	3.2 Monthly Average	REPORT Weekly Average	MG/L	4/Month	24 Hour Composite
November thru April	QL	***	***		***	***	***			
Nickel, Total Recoverable	Effluent Gross Value	3817.6 Monthly Average	5310.2 Daily Maximum	GR/DAY	*****	84.0 Monthly Average	116.9 Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	***	***		***	10	10			
Zinc, Total Recoverable	Effluent Gross Value	7807.4 Monthly Average	9951.2 Daily Maximum	GR/DAY	*****	171.8 Monthly Average	219.1 Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	***	***		***	30	30			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 2: Surface Water DMR Limits and Monitoring Requirements

PHASE: 2-Interim **PHASE Start Date:** 07/01/2016 **PHASE End Date:** 06/30/2017

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Copper, Total Recoverable	Effluent Gross Value	2467.3 Monthly Average	3288.8 Daily Maximum	GR/DAY	*****	54.3 Monthly Average	72.4 Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	***	***		***	10	10			
Total Toxic Organics (TTO) (40 CFR 433)	Effluent Gross Value	632.8 Monthly Average	1039.4 Daily Maximum	KG/DAY	*****	13.9 Monthly Average	22.8 Daily Maximum	MG/L	1/6 Months	Grab
January thru December	RQL	***	***		***	***	***			

Table III - A - 3: Surface Water DMR Limits and Monitoring Requirements

PHASE: 3-Final **PHASE Start Date:** 07/01/2017 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Flow, In Conduit or Thru Treatment Plant	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	MGD	*****	*****	*****	*****	Continuous	Metered
January thru December	QL	***	***		***	***	***			
pH	Raw Sew/influent	*****	*****	*****	REPORT Instant Minimum	*****	REPORT Instant Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			
pH	Effluent Gross Value	*****	*****	*****	6.0 Report Per Minimum	*****	9.0 Report Per Maximum	SU	2/Day	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 3: Surface Water DMR Limits and Monitoring Requirements

PHASE: 3-Final **PHASE Start Date:** 07/01/2017 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Solids, Total Suspended	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Effluent Gross Value	1360 Monthly Average	2000 Weekly Average	KG/DAY	*****	30 Monthly Average	45 Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Solids, Total Suspended	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	2/Week	Calculated
January thru December	QL	***	***		***	***	***			
Oil and Grease	Effluent Gross Value	*****	*****	*****	*****	10 Monthly Average	15 Instant Maximum	MG/L	2/Month	Grab
January thru December	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	82 Monthly Average	150 Daily Maximum	KG/DAY	*****	1.8 Monthly Average	3.3 Daily Maximum	MG/L	3/Week	24 Hour Composite
May thru October	QL	***	***		***	***	***			
Nitrogen, Ammonia Total (as N)	Effluent Gross Value	273 Monthly Average	495 Daily Maximum	KG/DAY	*****	6.0 Monthly Average	10.9 Daily Maximum	MG/L	3/Week	24 Hour Composite
November thru April	QL	***	***		***	***	***			
Nitrogen, Nitrate Total (as N)	Effluent Gross Value	REPORT Monthly Average	REPORT Daily Maximum	KG/DAY	*****	REPORT Monthly Average	REPORT Daily Maximum	MG/L	1/Quarter	24 Hour Composite
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 3: Surface Water DMR Limits and Monitoring Requirements

PHASE: 3-Final **PHASE Start Date:** 07/01/2017 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
E. Coli	Effluent Gross Value	*****	*****	*****	*****	126 Monthly Geo Avg	REPORT Instant Maximum	#/100ML	8/Month	Grab
January thru December	QL	***	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Raw Sew/influent	*****	*****	*****	*****	REPORT Monthly Average	REPORT Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Effluent Gross Value	363 Monthly Average	545 Weekly Average	KG/DAY	*****	8 Monthly Average	12 Weekly Average	MG/L	2/Week	24 Hour Composite
January thru December	QL	***	***		***	***	***			
BOD, Carbonaceous 5 Day, 20oC	Percent Removal	*****	*****	*****	85 Monthly Av Minimum	*****	*****	PERCENT	2/Week	Calculated
January thru December	QL	***	***		***	***	***			
IC25 Statre 7day Chr Ceriodaphnia	Effluent Gross Value	*****	*****	*****	44 Report Per Minimum	*****	*****	%EFFL	1/6 Months	Composite
January thru December	QL	***	***		***	***	***			
Chlorine Produced Oxidants	Effluent Gross Value	0.470 Monthly Average	1.14 Daily Maximum	KG/DAY	*****	0.01 Monthly Average	0.025 Daily Maximum	MG/L	2/Day	Grab
January thru December	RQL	4.5	4.5		***	0.1	0.1			
Temperature, oC	Raw Sew/influent	*****	*****	*****	REPORT Instant Minimum	REPORT Monthly Average	REPORT Instant Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 3: Surface Water DMR Limits and Monitoring Requirements

PHASE: 3-Final **PHASE Start Date:** 07/01/2017 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Temperature, oC	Effluent Gross Value	*****	*****	*****	REPORT Instant Minimum	REPORT Monthly Average	REPORT Instant Maximum	DEG.C	2/Day	Grab
January thru December	QL	***	***		***	***	***			
Oxygen, Dissolved (DO)	Effluent Gross Value	*****	*****	*****	6 Weekly Av Minimum	REPORT Daily Avg Minimum	*****	MG/L	3/Week	Grab
January thru December	QL	***	***		***	***	***			
Phosphorus, Total (as P)	Effluent Gross Value	*****	*****	*****	*****	0.76 Monthly Average	REPORT Weekly Average	MG/L	4/Month	24 Hour Composite
January thru December	QL	***	***		***	***	***			
Nickel, Total Recoverable	Effluent Gross Value	3817.6 Monthly Average	5310.2 Daily Maximum	GR/DAY	*****	84.0 Monthly Average	116.9 Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	***	***		***	10	10			
Zinc, Total Recoverable	Effluent Gross Value	7807.4 Monthly Average	9951.2 Daily Maximum	GR/DAY	*****	171.8 Monthly Average	219.1 Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	***	***		***	30	30			
Copper, Total Recoverable	Effluent Gross Value	2467.3 Monthly Average	3288.8 Daily Maximum	GR/DAY	*****	54.3 Monthly Average	72.4 Daily Maximum	UG/L	1/Month	24 Hour Composite
January thru December	RQL	***	***		***	10	10			

Surface Water DMR Reporting Requirements:

Submit a Monthly DMR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Refer to Part IV Section E.2. for the applicability of the discharge limitations and phase effective dates.

Table III - A - 3: Surface Water DMR Limits and Monitoring Requirements

PHASE: 3-Final **PHASE Start Date:** 07/01/2017 **PHASE End Date:**

Parameter	Sample Point	Limit	Limit	Units	Limit	Limit	Limit	Units	Frequency	Sample Type
Total Toxic Organics (TTO) (40 CFR 433)	Effluent Gross Value	632.8 Monthly Average	1039.4 Daily Maximum	KG/DAY	*****	13.9 Monthly Average	22.8 Daily Maximum	MG/L	1/Month	Grab
January thru December	RQL	***	***		***	***	***			

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Malathion	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Demeton	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Mirex	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Methoxychlor	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Parathion	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Delta BHC, Total (ug/l)	Effluent Gross Value	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Endosulfan Sulfate	Effluent Gross Value	REPORT RQL = 0.08	UG/L	24 Hour Composite	January thru December
Beta Endosulfan	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Alpha Endosulfan	Effluent Gross Value	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Endrin Aldehyde	Effluent Gross Value	REPORT RQL = 0.1	UG/L	24 Hour Composite	January thru December
PCB-1016 (Arochlor 1016)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
4,4'-DDT(p,p'-DDT)	Effluent Gross Value	REPORT RQL = 0.06	UG/L	24 Hour Composite	January thru December
4,4'-DDD(p,p'-DDD)	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
4,4'-DDE(p,p'-DDE)	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Aldrin	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Alpha BHC	Effluent Gross Value	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Beta BHC	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Gamma BHC (lindane),	Effluent Gross Value	REPORT RQL = 0.03	UG/L	24 Hour Composite	January thru December
Chlordane	Effluent Gross Value	REPORT RQL = 0.2	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Dieldrin	Effluent Gross Value	REPORT RQL = 0.03	UG/L	24 Hour Composite	January thru December
Endosulfans, Total (alpha and beta)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Endrin	Effluent Gross Value	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Toxaphene	Effluent Gross Value	REPORT RQL = 1	UG/L	24 Hour Composite	January thru December
Heptachlor	Effluent Gross Value	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Heptachlor Epoxide	Effluent Gross Value	REPORT RQL = 0.4	UG/L	24 Hour Composite	January thru December
PCB-1221 (Arochlor 1221)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1232 (Arochlor 1232)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1242 (Arochlor 1242)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1248 (Arochlor 1248)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1254 (Arochlor 1254)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1260 (Arochlor 1260)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Polychlorinated Biphenyls (PCBs)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Chlorpyrifos	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP).

Table III - A - 4: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Guthion	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - A - 5: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Chloride (as Cl)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Barium, Total (as Ba)	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Cyanide, Total (as CN)	Effluent Gross Value	REPORT RQL = 40	UG/L	Grab	January thru December
Thallium, Total Recoverable	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Arsenic, Total (as As)	Effluent Gross Value	REPORT RQL = 8	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - A - 5: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Beryllium, Total (as Be)	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Cadmium, Total (as Cd)	Effluent Gross Value	REPORT RQL = 4	UG/L	24 Hour Composite	January thru December
Chromium, Trivalent (as Cr)	Effluent Gross Value	REPORT RQL = 8	UG/L	24 Hour Composite	January thru December
Chromium, Total (as Cr)	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Lead, Total (as Pb)	Effl. Adjusted Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Silver, Total (as Ag)	Effluent Gross Value	REPORT RQL = 2	UG/L	24 Hour Composite	January thru December
Antimony, Total (as Sb)	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Selenium, Total (as Se)	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Chromium, Hexavalent Dissolved (as Cr)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Mercury, Total (as Hg)	Effluent Gross Value	REPORT RQL = 1	UG/L	24 Hour Composite	January thru December
Acenaphthylene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Acenaphthene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
Anthracene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Benzo(b)fluoranthene (3,4-benzo)	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Benzo(k)fluoranthene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - A - 5: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Benzo(a)pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethyl) ether	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethoxy) methane	Effluent Gross Value	REPORT RQL = 26.5	UG/L	24 Hour Composite	January thru December
Bis (2-chloroiso-propyl) ether	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Butyl benzyl phthalate	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Chrysene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Diethyl phthalate	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Dimethyl phthalate	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
1,2-Diphenyl-hydrazine	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Fluoranthene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Fluorene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachlorocyclo-pentadiene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachloroethane	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Indeno(1,2,3-cd)-pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Isophorone	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - A - 5: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
N-nitrosodi-n-propylamine	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
N-nitrosodiphenyl-amine	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
N-nitrosodimethyl-amine	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Nitrobenzene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Phenanthrene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Pyrene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(ghi)perylene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(a)anthracene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
1,2-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
1,2,4-Trichloro-benzene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Dibenzo(a,h) anthracene	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
1,3-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
1,4-Dichlorobenzene	Effluent Gross Value	REPORT RQL = 20	UG/L	Grab	January thru December
2-Chloronaphthalene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
2,4-Dinitrotoluene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - A - 5: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
2,6-Dinitrotoluene	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
3,3'-Dichloro-benzidine	Effluent Gross Value	REPORT RQL = 60	UG/L	24 Hour Composite	January thru December
4-Bromophenyl phenyl ether	Effluent Gross Value	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
Naphthalene	Effluent Gross Value	REPORT RQL = 8	UG/L	24 Hour Composite	January thru December
Bis(2-ethylhexyl) phthalate	Effluent Gross Value	REPORT RQL = 30	UG/L	24 Hour Composite	January thru December
Di-n-butyl phthalate	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzidine	Effluent Gross Value	REPORT RQL = 50	UG/L	24 Hour Composite	January thru December
Hexachlorobenzene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachlorobutadiene	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
1,3-Dichloropropene	Effluent Gross Value	REPORT RQL = 7	UG/L	Grab	January thru December
Dichlorobromomethane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Carbon Tetrachloride	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,2-Dichloroethane	Effluent Gross Value	REPORT RQL = 3	UG/L	Grab	January thru December
Bromoform	Effluent Gross Value	REPORT RQL = 8	UG/L	Grab	January thru December
Chloroform	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - A - 5: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Toluene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Benzene	Effluent Gross Value	REPORT RQL = 7	UG/L	Grab	January thru December
Acrolein	Effluent Gross Value	REPORT RQL = 50	UG/L	Grab	January thru December
Acrylonitrile	Effluent Gross Value	REPORT RQL = 50	UG/L	Grab	January thru December
Chlorobenzene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Chlorodibromomethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Ethylbenzene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Methyl Bromide	Effluent Gross Value	REPORT RQL = 9	UG/L	Grab	January thru December
Methyl Chloride	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Methylene Chloride	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
Tetrachloroethylene	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Trichlorofluoro-methane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
1,1-Dichloroethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1-Dichloroethylene	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,1-Trichloro-ethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - A - 5: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,1,2-Trichloro-ethane	Effluent Gross Value	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2,2-Tetrachloro-ethane	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
1,2-Dichloropropane	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
1,2-trans-Dichloro-ethylene	Effluent Gross Value	REPORT RQL = 4	UG/L	Grab	January thru December
2-Chloroethyl Vinyl Ether (Mixed)	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Vinyl Chloride	Effluent Gross Value	REPORT RQL = 10	UG/L	Grab	January thru December
Trichloroethylene	Effluent Gross Value	REPORT RQL = 5	UG/L	Grab	January thru December
Chloroethane	Effluent Gross Value	REPORT	UG/L	Grab	January thru December
Cyanide,free (amen. To Chlorination)	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Asbestos (Fibrous)	Effluent Gross Value	REPORT	FIBERS/L	24 Hour Composite	January thru December
Parachloro-m-cresol	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
Phenols	Effluent Gross Value	REPORT	UG/L	24 Hour Composite	January thru December
2-Chlorophenol	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
2-Nitrophenol	Effluent Gross Value	REPORT RQL = 18	UG/L	24 Hour Composite	January thru December
2,4-Dichlorophenol	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Semi Annual Reporting Requirements:

Submit a Semi-Annual WCR: within twenty-five days after the end of every 6 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - A - 5: Surface Water WCR - Semi Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
2,4-Dimethylphenol	Effluent Gross Value	REPORT RQL = 13.5	UG/L	24 Hour Composite	January thru December
2,4-Dinitrophenol	Effluent Gross Value	REPORT RQL = 40	UG/L	24 Hour Composite	January thru December
2,4,6-Trichloro- phenol	Effluent Gross Value	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
4-Chlorophenyl phenyl ether	Effluent Gross Value	REPORT RQL = 21	UG/L	24 Hour Composite	January thru December
4-Nitrophenol	Effluent Gross Value	REPORT RQL = 12	UG/L	24 Hour Composite	January thru December
4,6-Dinitro-o-cresol	Effluent Gross Value	REPORT RQL = 60	UG/L	24 Hour Composite	January thru December
Phenol Single Compound	Effluent Gross Value	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Pentachlorophenol	Effluent Gross Value	REPORT RQL = 30	UG/L	24 Hour Composite	January thru December

MONITORED LOCATION:	RECEIVING STREAM:	STREAM CLASSIFICATION:	DISCHARGE CATEGORY(IES):
IPPI DLA Influent Sampling			A - Sanitary Wastewater

Contributing Waste Types

Sanitary

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - B - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Cyanide, Total (as CN)	Raw Sew/influent	REPORT RQL = 40	UG/L	Grab	January thru December
Arsenic, Total (as As)	Raw Sew/influent	REPORT RQL = 8	UG/L	24 Hour Composite	January thru December
Beryllium, Total (as Be)	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Cadmium, Total (as Cd)	Raw Sew/influent	REPORT RQL = 4	UG/L	24 Hour Composite	January thru December
Chromium, Total (as Cr)	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Copper, Total (as Cu)	Raw Sew/influent	REPORT RQL = 0.01	UG/L	24 Hour Composite	January thru December
Lead, Total (as Pb)	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Thallium, Total (as Tl)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Nickel, Total (as Ni)	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Silver, Total (as Ag)	Raw Sew/influent	REPORT RQL = 2	UG/L	24 Hour Composite	January thru December
Zinc, Total (as Zn)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Antimony, Total (as Sb)	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - B - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Selenium, Total (as Se)	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Mercury, Total (as Hg)	Raw Sew/influent	REPORT RQL = 1	UG/L	24 Hour Composite	January thru December
Acenaphthylene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Acenaphthene	Raw Sew/influent	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
Anthracene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Benzo(b)fluoranthene (3,4-benzo)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Benzo(k)fluoranthene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(a)pyrene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethyl) ether	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Bis(2-chloroethoxy) methane	Raw Sew/influent	REPORT RQL = 26.5	UG/L	24 Hour Composite	January thru December
Bis (2-chloroiso-propyl) ether	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Butyl benzyl phthalate	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Chrysene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Diethyl phthalate	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Dimethyl phthalate	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - B - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,2-Diphenyl-hydrazine	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Fluoranthene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Fluorene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachlorocyclo-pentadiene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Hexachloroethane	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Indeno(1,2,3-cd)-pyrene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Isophorone	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
N-nitrosodi-n-propylamine	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
N-nitrosodiphenyl-amine	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
N-nitrosodimethyl-amine	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Nitrobenzene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Phenanthrene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Pyrene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(ghi)perylene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzo(a)anthracene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - B - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
1,2-Dichlorobenzene	Raw Sew/influent	REPORT RQL = 9	UG/L	24 Hour Composite	January thru December
1,2,4-Trichloro- benzene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
Dibenzo(a,h) anthracene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
1,3-Dichlorobenzene	Raw Sew/influent	REPORT RQL = 9	UG/L	24 Hour Composite	January thru December
1,4-Dichlorobenzene	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
2-Chloronaphthalene	Raw Sew/influent	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
2,4-Dinitrotoluene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
2,6-Dinitrotoluene	Raw Sew/influent	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
3,3'-Dichloro- benzidine	Raw Sew/influent	REPORT RQL = 60	UG/L	24 Hour Composite	January thru December
4-Bromophenyl phenyl ether	Raw Sew/influent	REPORT RQL = 9.5	UG/L	24 Hour Composite	January thru December
Naphthalene	Raw Sew/influent	REPORT RQL = 8	UG/L	24 Hour Composite	January thru December
Bis(2-ethylhexyl) phthalate	Raw Sew/influent	REPORT RQL = 30	UG/L	24 Hour Composite	January thru December
Di-n-butyl phthalate	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
Benzidine	Raw Sew/influent	REPORT RQL = 50	UG/L	24 Hour Composite	January thru December
Hexachlorobenzene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - B - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Hexachlorobutadiene	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December
1,3-Dichloropropene	Raw Sew/influent	REPORT RQL = 7	UG/L	Grab	January thru December
Dichlorobromomethane	Raw Sew/influent	REPORT	UG/L	Grab	January thru December
Carbon Tetrachloride	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
1,2-Dichloroethane	Raw Sew/influent	REPORT RQL = 3	UG/L	Grab	January thru December
Bromoform	Raw Sew/influent	REPORT RQL = 8	UG/L	Grab	January thru December
Chloroform	Raw Sew/influent	REPORT RQL = 5	UG/L	Grab	January thru December
Toluene	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
Benzene	Raw Sew/influent	REPORT RQL = 7	UG/L	Grab	January thru December
Acrolein	Raw Sew/influent	REPORT RQL = 50	UG/L	Grab	January thru December
Acrylonitrile	Raw Sew/influent	REPORT RQL = 50	UG/L	Grab	January thru December
Chlorobenzene	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
Chlorodibromomethane	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
Ethylbenzene	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
Methyl Bromide	Raw Sew/influent	REPORT RQL = 9	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - B - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Methyl Chloride	Raw Sew/influent	REPORT RQL = 10	UG/L	Grab	January thru December
Methylene Chloride	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
Tetrachloroethylene	Raw Sew/influent	REPORT RQL = 9	UG/L	Grab	January thru December
Trichlorofluoro- methane	Raw Sew/influent	REPORT RQL = 5	UG/L	Grab	January thru December
1,1-Dichloroethane	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
1,1-Dichloroethylene	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,1-Trichloro- ethane	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2-Trichloro- ethane	Raw Sew/influent	REPORT RQL = 6	UG/L	Grab	January thru December
1,1,2,2-Tetrachloro- ethane	Raw Sew/influent	REPORT RQL = 10	UG/L	Grab	January thru December
1,2-Dichloropropane	Raw Sew/influent	REPORT RQL = 5	UG/L	Grab	January thru December
1,2-trans-Dichloro- ethylene	Raw Sew/influent	REPORT RQL = 4	UG/L	Grab	January thru December
2-Chloroethyl Vinyl Ether (Mixed)	Raw Sew/influent	REPORT	UG/L	Grab	January thru December
Vinyl Chloride	Raw Sew/influent	REPORT RQL = 10	UG/L	Grab	January thru December
Trichloroethylene	Raw Sew/influent	REPORT RQL = 5	UG/L	Grab	January thru December
Chloroethane	Raw Sew/influent	REPORT	UG/L	Grab	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - B - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Parachloro-m-cresol	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Phenols	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Delta BHC, Total (ug/l)	Raw Sew/influent	REPORT RQL = 0.02	*****	24 Hour Composite	January thru December
Endosulfan Sulfate	Raw Sew/influent	REPORT RQL = 0.08	UG/L	24 Hour Composite	January thru December
Beta Endosulfan	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Alpha Endosulfan	Raw Sew/influent	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Endrin Aldehyde	Raw Sew/influent	REPORT RQL = 0.1	UG/L	24 Hour Composite	January thru December
PCB-1016 (Arochlor 1016)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
4,4'-DDT(p,p'-DDT)	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
4,4'-DDD(p,p'-DDD)	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
4,4'-DDE(p,p'-DDE)	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Aldrin	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Alpha BHC	Raw Sew/influent	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Beta BHC	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Gamma BHC (lindane),	Raw Sew/influent	REPORT RQL = 0.03	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - B - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Chlordane	Raw Sew/influent	REPORT RQL = 0.2	UG/L	24 Hour Composite	January thru December
Dieldrin	Raw Sew/influent	REPORT RQL = 0.03	UG/L	24 Hour Composite	January thru December
Endrin	Raw Sew/influent	REPORT RQL = 0.04	UG/L	24 Hour Composite	January thru December
Toxaphene	Raw Sew/influent	REPORT RQL = 1	UG/L	24 Hour Composite	January thru December
Heptachlor	Raw Sew/influent	REPORT RQL = 0.02	UG/L	24 Hour Composite	January thru December
Heptachlor Epoxide	Raw Sew/influent	REPORT RQL = 0.4	UG/L	24 Hour Composite	January thru December
PCB-1221 (Arochlor 1221)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1232 (Arochlor 1232)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1242 (Arochlor 1242)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1248 (Arochlor 1248)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1254 (Arochlor 1254)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
PCB-1260 (Arochlor 1260)	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
2-Chlorophenol	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
2-Nitrophenol	Raw Sew/influent	REPORT RQL = 18	UG/L	24 Hour Composite	January thru December
2,4-Dichlorophenol	Raw Sew/influent	REPORT RQL = 10	UG/L	24 Hour Composite	January thru December

Surface Water WCR - Annual Reporting Requirements:

Submit an Annual WCR: within twenty-five days after the end of every 12 month monitoring period beginning from the effective date of the permit (EDP). Pursuant to N.J.A.C. 7:14A-19.3(c)7.i., the influent sample for priority pollutant scan shall be collected to coincide with the effluent and sludge monitoring for priority pollutants.

Table III - B - 1: Surface Water WCR - Annual Limits and Monitoring Requirements

PHASE: Final **PHASE Start Date:** 07/01/2015 **PHASE End Date:**

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
2,4-Dimethylphenol	Raw Sew/influent	REPORT RQL = 13.5	UG/L	24 Hour Composite	January thru December
2,4-Dinitrophenol	Raw Sew/influent	REPORT RQL = 40	UG/L	24 Hour Composite	January thru December
2,4,6-Trichloro- phenol	Raw Sew/influent	REPORT RQL = 20	UG/L	24 Hour Composite	January thru December
4-Chlorophenyl phenyl ether	Raw Sew/influent	REPORT RQL = 21	UG/L	24 Hour Composite	January thru December
4-Nitrophenol	Raw Sew/influent	REPORT RQL = 12	UG/L	24 Hour Composite	January thru December
4,6-Dinitro-o-cresol	Raw Sew/influent	REPORT RQL = 60	UG/L	24 Hour Composite	January thru December
Phenol Single Compound	Raw Sew/influent	REPORT	UG/L	24 Hour Composite	January thru December
Pentachlorophenol	Raw Sew/influent	REPORT RQL = 30	UG/L	24 Hour Composite	January thru December

PART IV

SPECIFIC REQUIREMENTS: NARRATIVE

Sanitary Wastewater

A. MONITORING REQUIREMENTS

1. Standard Monitoring Requirements

a. Each analysis required by this permit shall be performed by a New Jersey Certified Laboratory that is certified to perform that analysis.

b. The Permittee shall perform all water/wastewater analyses in accordance with the analytical test procedures specified in 40 CFR 136, unless other test procedures have been approved by the Department in writing or as otherwise specified in the permit.

c. The permittee shall utilize analytical methods that will ensure compliance with the Quantification Levels (QLs) listed in PART III. QLs include, but are not limited to, Recommended Quantification Levels (RQLs) and Method Detection Levels (MDLs). If the permittee and/or contract laboratory determines that the QLs achieved for any pollutant(s) generally will not be as sensitive as the QLs specified in PART III, the permittee must submit a justification of such to the Bureau of Surface Water Permitting. For limited parameters with no QL specified, the sample analysis shall use a detection level at least as sensitive as the effluent limit.

d. All sampling shall be conducted in accordance with the Department's Field Sampling Procedures Manual, or an alternate method approved by the Department in writing.

e. All monitoring shall be conducted as specified in Part III.

f. All sample frequencies expressed in Part III are minimum requirements. Any additional samples taken consistent with the monitoring and reporting requirements contained herein shall be reported on the Monitoring Report Forms.

g. Annual and semi-annual wastewater testing shall be conducted in a different quarter of each year so that tests are conducted in each of the four permit quarters of the permit cycle. Testing may be conducted during any month of the permit quarters.

h. Any influent, effluent, and sludge sampling for toxic pollutant analyses shall be collected concurrently.

i. Flow ("Flow Rate") shall be measured by utilizing two flow meters. By subtracting the Flow measured by the the service meter from the effluent ("Flow Total") meter in order to calculate the flow discharged to the Rockaway River.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

a. The permittee shall retain records of all monitoring information, including 1) all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if applicable), 2) copies of all reports required by this NJPDES permit, 3) all data used to complete the application for a NJPDES permit, and 4) monitoring information required by the permit related to the permittee's residual use and/or disposal practices, for a period of at least 5 years, or longer as required by N.J.A.C. 7:14A-20, from the date of the sample, measurement, report, application or record.

b. Records of monitoring information shall include 1) the date, locations, and time of sampling or measurements, 2) the individual(s) who performed the sampling or measurements, 3) the date(s) the analyses were performed, 4) the individual(s) who performed the analyses, 5) the analytical techniques or methods used, and 6) the results of such analyses.

C. REPORTING

1. Standard Reporting Requirements

a. Any MRFs in paper format shall be submitted to the following addresses:

i. NJDEP
Mail Code - 401-02B
Division of Water Quality
Office of Permit Management
P.O. Box 420
Trenton, New Jersey 08625-0420

ii. (if requested by the Water Compliance and Enforcement Bureau)
NJDEP: Northern Bureau of Water Compliance and Enforcement
7 Ridgedale Avenue
Cedar Knolls, New Jersey 07927-1112

b. Any electronic data submission shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee. Paper copies must be available for on-site inspection by DEP personnel or provided to the DEP upon written request.

c. All monitoring report forms shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.

d. The highest ranking official may delegate responsibility to certify the monitoring report forms in his or her absence. Authorizations for other individuals to sign shall be made in accordance with N.J.A.C. 7:14A-4.9(b).

e. Monitoring results shall be submitted in accordance with the current Discharge Monitoring Report Manual and any updates thereof.

f. If monitoring for a parameter is not required in a monitoring period, the permittee must report "CODE=N" for that parameter.

g. For intermittent discharges, the permittee shall obtain a sample during at least one of the discharge events occurring during a monitoring period.

h. If there are no discharge events during an entire monitoring period, the permittee must notify the Department when submitting the monitoring results. This is accomplished by placing a check mark in the "No Discharge this monitoring period" box on the paper or electronic version of the monitoring report submittal form.

D. SUBMITTALS

1. Standard Submittal Requirements

a. The permittee shall amend the Operation & Maintenance Manual whenever there is a change in the treatment works design, construction, operations or maintenance which substantially changes the treatment works operations and maintenance procedures.

2. Compliance Schedule Progress Reports

a. In accordance with N.J.A.C. 7:14A-6.4(a), a schedule of compliance has been included for E Coli, Chronic WET (CWET), and Phosphorus, including interim deadlines for annual progress reports that outline the progress towards compliance with the conditions of the permit.

i. Submit a Compliance Schedule Progress Report: within 6 months from the effective date of the permit (EDP). (phosphorus and E. Coli).

ii. Submit a Compliance Schedule Progress Report: within 12 months from the effective date of the permit (EDP) Phosphorus and Chronic Wet (CWET).

iii. Submit a Compliance Schedule Progress Report: within 18 months from the effective date of the permit (EDP). (phosphorus only)

iv. Submit a Compliance Schedule Progress Report: within 24 months from the effective date of the permit (EDP) Phosphorus and Chronic WET (CWET).

v. Submit a Compliance Schedule Progress Report: within 30 months from the effective date of the permit (EDP). (phosphorus only)

b. The compliance schedule progress report(s) shall be submitted to the following Departmental entities:

i. NJDEP: Division of Water Quality
Mail Code - 401-02B
Bureau of Surface Water Permitting
P.O. Box 420
Trenton, New Jersey 08625-0420

ii. NJDEP: Northern Bureau of Water Compliance and Enforcement
7 Ridgedale Avenue
Cedar Knolls, New Jersey 07927-1112

E. FACILITY MANAGEMENT

1. Discharge Requirements

a. The permittee shall discharge at the location(s) specified in PART III of this permit.

b. The permittee shall not discharge foam or cause foaming of the receiving water that 1) forms objectionable deposits on the receiving water, 2) forms floating masses producing a nuisance, or 3) interferes with a designated use of the waterbody.

c. The permittee's discharge shall not produce objectionable color or odor in the receiving stream.

d. The discharge shall not exhibit a visible sheen.

e. When quantification levels (QL) and effluent limits are both specified for a given parameter in Part III, and the QL is less stringent than the effluent limit, effluent compliance will be determined by comparing the reported value against the QL.

f. When an average of three (3) consecutive 12-month rolling monthly average values of the committed flow reaches or exceeds 80% of 12 MGD (the permitted capacity of the facility), the permittee shall:.

i. Develop a Capacity Assurance Program (CAP) in accordance with N.J.A.C. 7:14A-22.16.

ii. For more information concerning the CAP, please contact the Bureau of Engineering and Construction Permitting North at (609) 292-6894.

iii. Contact the Division of Watershed Management to discuss whether an amendment to the Water Quality Management Plan (WQMP) or Wastewater Management Plan (WMP) will be necessary.

2. Applicability of Discharge Limitations and Effective Dates

a. Surface Water Discharge Monitoring Report (DMR) Form Requirements

i. This permit includes multiple phases for DSN001A.
The Initial 1 Phase limitation and monitoring conditions are effective from the effective date of the permit (EDP) until EDP + 12 months. the permittee shall comply with the specified effluent monitoring and reporting for E- Coli along with the effluent limitations for Fecal Coliform..
During the Interim 2 Phase beginning EDP + 12 months, the permittee shall meet the final effluent limitations for E. Coli when Fecal Coliform will be taken out of the permit.
During the Initial phase, from EDP + 12 months, and the Interim 2 Phase, EDP + 12 to EDP + 36 months, the permittee shall continue to meet the existing limitations for phosphorus and WET.
Beginning the Final 3 Phase, i.e., beginning EDP + 36 months, the permittee shall meet the new final effluent limitations for Phosphorus and WET.

b. Wastewater Characterization Report (WCR) Form Requirements

i. The final effluent monitoring conditions contained in PART III for DSN001A apply for the full term of this permit action.

3. Operation, Maintenance and Emergency conditions

a. The permittee shall operate and maintain treatment works and facilities which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit as specified in the Operation & Maintenance Manual.

b. The permittee shall develop emergency procedures to ensure effective operation of the treatment works under emergency conditions in accordance with N.J.A.C. 7:14A-6.12(d).

4. Toxicity Testing Requirements - Chronic Whole Effluent Toxicity

a. The permittee shall conduct toxicity tests on its wastewater discharge in accordance with the provisions in this section. Such testing will determine if appropriately selected effluent concentrations adversely affect the test species.

b. Chronic toxicity tests shall be conducted using the test species and method identified in Part III of this permit.

c. Any test that does not meet the specifications contained in the Department's "Chronic Toxicity Testing Specifications for Use in the NJPDES Program" document must be repeated within 30 days of the completion of the initial test. The repeat test shall not replace subsequent testing required in Part III.

d. The permittee shall collect and analyze the concentration of ammonia-N in the effluent on the day a sample is collected for WET testing. This result is to be reported on the Biomonitoring Report Form.

e. IC25 - Inhibition Concentration - Concentration of effluent which has an inhibitory effect on 25% of the test organisms for the monitored effect, as compared to the control (expressed as percent effluent).

f. Test results shall be expressed as the IC25 for each test endpoint. Where a chronic toxicity testing endpoint yields IC25's from more than one test endpoint, the most sensitive endpoint will be used to evaluate effluent toxicity.

g. The permittee shall resubmit a Chronic Methodology Questionnaire within 60 days of any change in laboratory.

h. Submit a chronic whole effluent toxicity test report: within 6 months from the effective date of the permit (EDP). The permittee shall submit toxicity test results on appropriate forms.

i. Test reports shall be submitted to:

   i. New Jersey Department of Environmental Protection
   401-02B
   Division of Water Quality
   Bureau of Surface Water Permitting
   401 East State Street
   P.O. Box 420
   Trenton, New Jersey 08625-0420

5. Toxicity Reduction Implementation Requirements (TRIR)

a. The permittee shall initiate a tiered toxicity investigation if two out of six consecutive WET tests demonstrate that the effluent does not comply or will not comply with the toxicity limit or action level specified in Part III of this permit.

   i. If the exceedence of the toxicity limit or action level is directly caused by a documented facility upset, or other unusual event which has been identified and appropriately remedied by the permittee, the toxicity test data collected during the event may be eliminated when determining the need for initiating a TRIR upon written Department approval.

b. The permittee shall begin toxicity characterization within 30 days of the end of the monitoring period when the second toxicity test exceeds the toxicity limits or action levels in Part III. The monitoring frequency for toxicity testing shall be increased to semi-monthly (i.e. every two months). Up to 12 additional tests may be required.

c. The permittee shall begin toxicity characterization within 30 days of the end of the monitoring period when the second toxicity test exceeds the toxicity limits or action levels in Part III. The monitoring frequency for toxicity testing shall be increased to monthly. Up to 12 additional tests may be required.

   i. The permittee may return to the toxicity testing frequency specified in Part III if four consecutive toxicity tests conducted during the Toxicity Characterization do not exceed the toxicity limit or action level.

   ii. If two out of any six consecutive, acceptable tests again exceed the toxicity limit or action level in Part III, the permittee shall repeat the Toxicity Reduction Implementation Requirements.

d. The permittee shall initiate a preliminary toxicity identification (PTI) upon the third exceedence of the toxicity limit or action level specified in Part III during toxicity characterization.

   i. The permittee may return to the monitoring frequency specified in PART III while conducting the PTI. If more frequent WET testing is performed during the PTI, the permittee shall submit all biomonitoring reports to the DEP and report the results for the most sensitive species on the DMR.

   ii. As appropriate, the PTI shall include:
      (1) treatment plant performance evaluation,
      (2) pretreatment program information,
      (3) evaluation of ammonia and chlorine produced oxidants levels and their effect on the toxicity of the discharge,
      (4) evaluation of chemical use and processes at the facility, and
      (5) an evaluation of incidental facility procedures such as floor washing, and chemical spill disposal which may contribute to effluent toxicity.

   iii. If the permittee demonstrates that the cause of toxicity is the chlorine added for disinfection or the ammonia concentration in the effluent and the chlorine and/or ammonia concentrations are below the established water quality based effluent limitation for chlorine and/or ammonia, the permittee shall identify the procedures to be used in future toxicity tests to account for chlorine and/or ammonia toxicity in their preliminary toxicity identification report.

   iv. The permittee shall submit a Preliminary Toxicity Identification Notification within 15 months of triggering TRIR. This notification shall include a determination that the permittee intends to demonstrate compliance OR plans to initiate a CTI.

e. The permittee must demonstrate compliance with the WET limitation or action level in four consecutive WET tests to satisfy the requirements of the Toxicity Reduction Investigation Requirements. After successful completion, the permittee may return to the WET monitoring frequency specified in PART III.

f. The permittee shall initiate a Comprehensive Toxicity Investigation (CTI) if the PTI does not identify the cause of toxicity and a demonstration of consistent compliance with the toxicity limit or action level in Part III can not be made.

   i. The permittee shall develop a project study plan identifying the party or parties responsible for conducting the comprehensive evaluation, establish a schedule for completing the study, and a description of the technical approach to be utilized.

ii. If the permittee determines that the PTI has failed to demonstrate consistent compliance with the toxicity limit or action level in Part III , a Comprehensive Toxicity Investigation Workplan must be prepared and submitted within 90 days.

iii. The permittee shall summarize the data collected and the actions taken in CTI Quarterly Reports. The reports shall be submitted within 30 calendar days after the end of each quarter.

iv. The permittee shall submit a Final CTI Report 90 calendar days after the last quarterly report. The final CTI report shall include the corrective actions identified to reduce toxicity and a schedule for implementing these corrective actions.

g. Upon receipt of written approval from the Department of the corrective action schedule, the permittee shall implement those corrective actions consistent with that schedule.

i. The permittee shall satisfy the requirements of the Toxicity Reduction Implementation Requirements and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the toxicity limit or action level in Part III in four consecutive toxicity tests.

ii. If the implemented corrective measures do not result in consistent compliance with the toxicity limit or action level in Part III, the permittee shall submit a plan for resuming the CTI.

iii. Documents regarding Toxicity Investigations shall be sent to the following:
New Jersey Department of Environmental Protection
401-02B
Division of Water Quality
Bureau of Surface Water Permitting
401 East State Street
P.O. Box 420
Trenton, New Jersey 08625-0420

iv. The permittee may conduct an instream study prior to initiating a CTI after completing the PTI which was unsuccessful in identifying and remediating effluent toxicity.

v. The study shall, at a minimum include an evaluation of the major stream communities including but not limited to: Benthics, fish, phytoplankton and periphyton, shall be performed at or near 7Q10 flow conditions and shall address seasonal community structure and system function. The study shall evaluate measures of growth, reproduction and incidences of diseases.

vi. The permittee electing to conduct an instream study shall submit a project work plan to the Department for approval prior to initiating the study.

vii. The permittee shall satisfy the requirements of the Instream study and return to the original toxicity monitoring frequency after corrective actions are implemented and the permittee demonstrates consistent compliance with the next four consecutive toxicity tests.

6. Introduction to RWBR Requirements

a. The following RWBR sections contain the conditions for the permittee to beneficially reuse treated effluent or Reclaimed Water for Beneficial Reuse (RWBR), provided the effluent is in compliance with the criteria specified for the particular use specified below.

b. There are two levels of RWBR uses. Public Access and Restricted Access.

7. Inactive RWBR Requirements

a. The following RWBR sections are included in this permit for various reuse applications. These sections are inactive and not effective unless the status column in Appendix B states the reuse activity is approved. Any specific RWBR type not approved in the Appendix, may be approved at a later date by a minor modification permit action once the appropriate submittal requirements have been received and approved by the Department.

8. RWBR Requirements for Public Access

a. The Public Access reuse types authorized by this permit are those approved in Appendix B. Other Public Access reuse types may be added by minor modification of this permit.

b. The hydraulic loading rate for land application of RWBR shall not exceed 2 inches per week.

c. Any water diverted for RWBR shall be monitored and comply with the high level treatment requirements listed below and the operational requirements in the approved Operations Protocol. If any of these requirements are not achieved, the effluent shall not be diverted for RWBR.

i. Total Suspended Solids (TSS): Instantaneous maximum of 5.0 mg/L prior to disinfection.

ii. Nitrogen, Total (NO3 + NH3): Daily maximum of 10.0 mg/L. This requirement only applies when RWBR is land applied.

iii. Fecal Coliform: 7-day median maximum of 2.2 colonies per 100 mL and an instantaneous maximum of 14 colonies per 100 mL.

iv. Chlorine Produced Oxidants (CPO): If the permittee disinfects utilizing chlorine, an instantaneous minimum of 1.0 mg/L after fifteen minutes contact time at peak hourly flow must be met.

v. Ultraviolet Disinfection: If the permittee disinfects utilizing UV disinfection, a minimum design UV dose of 100 mJ/cm2 under maximum daily flow must be used. All aspects of the UV system must meet the requirements of the May 2003 (or most recent) National Water Research Institute's Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse, second edition.

vi. Turbidity for UV systems: Instantaneous maximum of 2.0 NTU.

d. Monitoring of the diverted public access RWBR shall be conducted in the following manner:

i. Sampling for TSS shall be immediately prior to disinfection. Monitoring for TSS shall be a grab sample once per week.

ii. Sampling for Turbidity in systems shall be sampled immediately prior to disinfection. The permittee shall establish a correlation between Turbidity and TSS in their effluent as detailed in the Reuse Technical Manual. A statistically significant correlation between Turbidity and TSS shall be established prior to commencement of the RWBR program and shall be incorporated into the Operations Protocol and updated annually. The initial correlation should be done as part of a daily monitoring program for at least 30 days. To ensure continuous compliance with the 5.0 mg/L TSS level, Turbidity must be monitored continuously and achieve the level established in the Operations Protocol.

iii. For chlorine disinfection, monitoring for CPO shall be continuous and shall be monitored after the appropriate contact time is achieved.

iv. For UV systems, UV lamp intensity, UV transmittance and UV flow rate shall be monitored continuously after full disinfection treatment.

v. Monitoring for Fecal Coliform shall be a grab sample, taken in accordance with Part III, at least a minimum of once per week taken immediately after disinfection. Fecal coliform shall be monitored immediately after disinfection.

vi. Monitoring for Total Nitrogen (NO3 + NH3) shall be a composite sample, taken in accordance with Part III, at least once per week taken prior to RWBR diversion. Total Nitrogen (NO3 + NH3) shall be monitored after the appropriate disinfection treatment is achieved.

e. All monitoring results of the RWBR shall be reported each month on Wastewater Characterization Reports (WCR). Unless noted otherwise, the highest of all measured values for diverted RWBR shall be reported.

i. If chlorine is used for disinfection, the lowest sampling result obtained during the reporting month shall be reported for CPO.

ii. If ultraviolet disinfection is used, the lowest sampling results obtained during the reporting month shall be reported for lamp intensity and UV transmittance.

9. RWBR Requirements for Restricted Access--Land Application and Non Edible Crops

a. The Restricted Access--Land Application and Non Edible Crops reuse types authorized by this permit are those approved in Appendix B. Other Restricted Access--Land Application and Non Edible Crops reuse types may be added by minor modification of this permit.

b. The hydraulic loading rate for land application of RWBR shall not exceed 2 inches per week.

c. Any water diverted for RWBR shall be monitored and comply with the high level treatment requirements listed below and the operational requirements in the approved Operations Protocol. If any of these requirements are not achieved, the effluent shall not be diverted for RWBR.

d. Nitrogen, Total (NO3 + NH3): Daily maximum of 10 mg/L. Frequency of sampling for Total Nitrogen shall be in accordance with Part III of this permit at a minimum monthly . The sample shall be collected as a composite sample taken prior to diversion for RWBR. Nitrogen, Total (NO3 + NH3) shall be monitored after the appropriate disinfection treatment time is achieved. This requirement only applies when RWBR is land applied, however, this requirement does not apply to spray irrigation within a fenced perimeter or otherwise restricted area.

e. E.Coli shall comply with the permit limitations table in Part III of the permit. Frequency of sampling for Fecal Coliform shall be in accordance with Part III of this permit. The sample shall be collected as a grab sample taken immediately after disinfection.

f. Chlorine Produced Oxidants (CPO): For chlorine disinfection, instantaneous minimum of 1.0 mg/L after fifteen minutes contact time at peak hourly flow. Frequency of sampling for CPO shall be [in accordance with Part III of this permit at a minimum weekly . The sample shall be collected as a grab sample taken immediately after disinfection. The value reported for CPO shall be the minimum sampling result obtained during the reporting month for diverted RWBR. Chlorine Produced Oxidants (CPO) shall be monitored after the appropriate contact time is achieved.

g. Ultraviolet Disinfection: For UV disinfection, a minimum design UV dose of 75 mJ/cm2 under maximum daily flow must be used. This dose must also be based on continuous monitoring of UV lamp intensity, UV transmittance and UV flow rate. All aspects of the UV system must meet the requirements of the May 2003 (or most recent) National Water Research Institute's Ultraviolet Disinfection Guidelines for Drinking Water and Water Reuse, second edition. UV lamp intensity, UV transmittance and UV flow rate shall be monitored continuously after full disinfection treatment.

h. All monitoring results of the RWBR shall be reported each month on Wastewater Characterization Reports (WCR). Unless noted otherwise, the highest of all measured values for diverted RWBR shall be reported.

10. RWBR Requirements for Restricted Access--Construction and Maintenance Operations

a. The Restricted Access--Construction and Maintenance Operations reuse types authorized by this permit are those approved in Appendix B. Other Restricted Access--Construction and Maintenance Operations reuse types may be added by minor modification of this permit.

b. E. Coli shall comply with the permit limitations specified in the effluent Limitations Table in PartIII of the permit. Frequency of sampling for Fecal Coliform shall be in accordance with Part III of this permit. E. Coli shall be monitored immediately after disinfection. This requirement does not apply to sanitary sewer jetting.

11. RWBR Requirements for Restricted Access--Industrial Systems

a. The Restricted Access--Industrial Systems reuse types authorized by this permit are those approved in Appendix B. Other Restricted Access--Industrial Systems reuse types may be added by minor modification of this permit.

12. RWBR Submittal Requirements

a. For all types of RWBR, with the exception of sanitary sewer jetting and STP washdown water, the permittee shall submit and receive approval of an Operations Protocol or modify the existing Operations Protocol as detailed in the most recent version of the Department's "Technical Manual for Reclaimed Water for Beneficial Reuse" (Reuse Technical Manual) prior to the commencement of any RWBR activity. A copy of the approved Operations Protocol shall be maintained onsite. Specific requirements for the Operations Protocol are identified in the Reuse Technical Manual.

b. The permittee shall submit a copy of the Reuse Supplier and User Agreement with each request for authorization to distribute RWBR in which the user is a different entity than the supplier. Specific requirements for the Reuse Supplier and User Agreement are identified in the Reuse Technical Manual.

c. For Public Access RWBR on Edible Crops, the permittee shall submit an annual inventory of edible crop irrigation with the Beneficial Reuse Annual Report. Specific requirements for the annual inventory are identified in the Reuse Technical Manual.

d. Submit a Beneficial Reuse Annual Report: by February 1 of each year beginning from the next year from effective date of the permit (EDP). The permittee shall compile the total volume of RWBR distributed to each type of authorized RWBR activity for the previous calendar year. Specific requirements for the Annual Reuse Report are identified in the Reuse Technical Manual.

e. The permittee shall submit and receive approval of an Engineering Report in support of RWBR authorization requests for new or expanded RWBR projects as detailed in the most recent version of the Department's "Technical Manual for Reclaimed Water for Beneficial Reuse" (Reuse Technical Manual) prior to the commencement of this/these type/s of RWBR activity. A copy of the approved Engineering Report shall be maintained onsite. Specific requirements for the Engineering Report are identified in the Reuse Technical Manual.

f. All submittals shall be mailed or delivered to: New Jersey Department of Environmental Protection, Division of Water Quality, Bureau of Surface Water Permitting, P.O. Box 029, Trenton, New Jersey 08625.

13. RWBR Operational Requirements

a. Effluent that does not meet the requirements for RWBR established in Part III, Part IV and the operational requirements specified in the facility's approved Operations Protocol shall not be diverted for RWBR.

b. The land application of RWBR shall not produce surface runoff or ponding.

c. All setback distances shall be consistent with the distances outlined in the Reuse Technical Manual.

d. Land application sites shall not be frozen or saturated when applying RWBR.

e. A daily log noting the volume of RWBR distributed to each approved application site shall be maintained on-site by the permittee and made available to the Department upon request. The volume of RWBR to be distributed shall be determined through the use of a totalizing flow meter, or other means of accurate flow measurement.

f. Any vehicle used to transport and/or distribute RWBR shall be appropriately marked. The vehicle shall not be used to transport water or other fluid that does not meet all limitations and requirements as specified in this permit for water diverted for RWBR, unless the tank has been emptied and adequately cleaned prior to the addition of the RWBR.

g. The permittee shall post Access Control and Advisory Signs in accordance with the requirements of the Reuse Technical Manual.

h. There shall be no cross-connections to potable water systems.

i. All RWBR piping, pipelines, valves, and outlets shall be appropriately color coded, tagged or labeled to warn the public and employees that the water is not intended for drinking. Worker contact with RWBR shall be minimized.

j. The issuance of this permit for the use of RWBR shall not be considered as a waiver of any applicable federal, state or local rule, regulation or ordinance.

F. INDUSTRIAL PRETREATMENT PROGRAM REQUIREMENTS

1. General Requirements

a. The Permittee has developed an industrial pretreatment program pursuant to the General Pretreatment Regulations 40 CFR Part 403 and N.J.A.C. 7:14A-1 et seq. The Permittee shall implement and enforce its approved pretreatment program to prevent the introduction of pollutants into its system which would:

i. interfere with attainment of the effluent limitations contained in the permittee's NJPDES permit;

ii. pass through the treatment works and impair the water quality of the receiving stream; or

iii. affect sludge quality so as to interfere with the use or management of the municipal sludge.

b. The Permittee shall comply with the public participation and notification requirements, including but not limited to, those specified in N.J.A.C. 7:14A-19.10, and 40 CFR Part 25.

c. The Permittee shall secure and maintain sufficient resources and qualified personnel to carry out the program implementation procedures described in this permit.

2. Identify and Locate Industrial Users

a. The Permittee shall update its inventory of indirect users at a frequency and diligence adequate to ensure proper identification of indirect users subject to pretreatment standards, appropriate characterization of the nature of their discharges, and correct designation of indirect users as categorical, significant/major, or other regulated. At a minimum, this inventory shall be updated annually and shall be included in the Pretreatment Program 40 CFR Part 403 Annual Report.

b. The Permittee shall notify an indirect user of pretreatment standards and requirements within thirty (30) days of the determination of the indirect user being subject to regulation under the pretreatment program.

3. Program Modifications

a. The Permittee shall notify the Bureau of Pretreatment and Residuals (BPR) of all substantial industrial pretreatment program (IPP) modifications, as defined under 40 CFR 403.18(b), and comply with the program modification requirements under N.J.A.C. 7:14A-19.9. The Permittee must await formal approval from the BPR before implementing substantial program modifications.

b. For non-substantial program modifications, the Permittee shall provide to the BPR the information required under N.J.A.C. 7:14A-19.9(b). The Permittee, as required by 40 CFR 403.18(d)(1), must submit this information to the BPR at least 45 days prior to implementation. Modifications that are not considered substantial are deemed approved unless the Department notifies the Permittee within 45 days that the modifications are not approved.

4. Develop Local Limits

a. The Permittee has developed and shall enforce local limits as required by N.J.A.C. 7:14A-19.7.

b. The Permittee shall submit a written technical evaluation of the need to revise local limits as required under N.J.A.C. 7:14A-19.7(f).

c. The written technical evalulation required in b. above shall be submitted: within 6 months from the effective date of the permit (EDP).

5. Issue IPP Permits

a. The Permittee must issue an individual IPP Permit to those facilities which are classified as 'Industrial Users' (IU) as defined in the "Rockaway Valley Regional Sewerage Authority (RVRSA) Rules and Regulations.

b. These individual IPP Permits must contain the minimum requirements as specified under N.J.A.C. 7:14A-19.8(b).

c. The Permittee shall issue a draft IPP Permit to a newly identified IU within 180 days of identifying that IU.

i. New IU shall receive an IPP Permit prior to commencement of discharge.

ii. The Permittee shall issue or reissue the IPP Permits, in absence of litigation and/or enforcement action(s) initiated by the Permittee, within one hundred and eighty (180) days of the expiration date of the IPP Permit previously issued to an existing industrial user.

6. Perform Compliance Monitoring and Inspections

a. The Permittee shall randomly inspect indirect users and randomly sample and analyze indirect user effluents at a frequency commensurate with the character, consistency, and volume of the contribution. However, the frequency of sampling shall be adequate to determine the compliance status of the indirect user exclusive of self-monitoring data submitted by the user. Specifically, the frequency of inspection and sampling of all Significant Indiret Users (SIUs), as defined by RVRSA, shall be no less than once per year for inspection and no less than once per year for sampling. Also, in accordance with N.J.A.C. 7:14A-19.6(a)1, facilities which have an IPP permit from the POTW but do not meet the POTW's definition of SIU, and are not CIUs, must be inspected by the POTW once per year and must be sampled by the POTW at least once every three (3) years.

b. Sample collection and analysis and the gathering of other compliance data shall be performed with sufficient care to produce evidence admissible in judicial enforcement proceedings.

7. Take Enforcement Actions

a. The permittee shall take enforcement actions based upon indirect users' noncompliance in accordance with its approved enforcement response plan.

8. Perform Data Management and Record Keeping

a. The Permittee shall develop and maintain a data management system which includes industrial user inventory, characterization of discharge, compliance status, IPP permit status, and enforcement actions.

b. The Permittee shall retain for a minimum of five (5) years all records of monitoring activities and results (whether or not such activities are required by this permit) and shall make such records available to EPA and the State upon request.

9. Notification Requirements

a. The Permittee shall notify its significant industrial users in writing of their obligation to comply with applicable requirements under Subtitles C and D of the Resource Conservation and Recovery Act (RCRA).

10. Pretreatment Annual Report

a. The Permittee shall submit a report annually to the Bureau of Pretreatment and Residuals describing the Permittee's pretreatment activities for the twelve (12) month period fromMay 1st through April 30th. In the event that the Permittee is not in compliance with any conditions or requirements of this permit, the Permittee shall also include the reason for noncompliance and state how and when the Permittee shall comply with such conditions and requirements.

b. Submit the Annual Pretreatment Program Report: by June 1 of each year beginning from the effective date of the permit (EDP).

i. a summary of analytical results of the priority pollutant scans performed on the Delegated Local Agency's (DLA) influent, effluent, and sludge;

ii. a discussion of upset, interference, or pass through incidents, if any, at the DLA treatment plant(s) which the Permittee knows or suspects were caused by indirect users of the DLA system. The discussion shall include the reasons why the incidents occurred, the corrective actions taken, and, if known, the name and address of the indirect user(s) responsible;

iii. an updated list of the Permittee's industrial users including their names and addresses, and a list of deletions and additions. The Permittee shall provide a brief explanation for each deletion. The list shall identify the industrial users subject to Federal categorical standards and which set(s) of standards are applicable; significant/major non-categorical IUs (as defined by the DLA); and other regulated non-categorical industries. The Permittee shall characterize the compliance status of each industrial user with respect to the discharge limitations and reporting requirements;

iv. a summary of the inspection and sampling activities conducted by the Permittee during the period covered by the annual report to gather information and data regarding industrial users;

v. a summary of the compliance and enforcement activities during the period covered by the annual report. The summary shall include administrative and legal/judicial actions initiated by the permittee during the period noted;

vi. a description of any significant changes in operating the pretreatment program which differ from the information in the Permittee's approved DLA pretreatment program including, but not limited to, changes concerning:
(1) the program's administrative structure
(2) local industrial discharge limitations
(3) monitoring program or monitoring frequencies
(4) Legal authority or enforcement policy
(5) funding mechanisms
(6) resource requirements
(7) staffing levels;

vii. a summary of the annual pretreatment funding, including salaries (as a lump sum), analytical costs for both in-house and contract analyses, equipment costs, and other expenditures associates with implementation of the pretreatment program. The Permittee must also provide a manpower estimate in full-time equivalents (FTEs);

viii. a summary of public participation activities to involve and inform the public. This shall include a copy of the annual publication of significant non-compliance, if such publication was needed to comply with N.J.A.C. 7:14A-19.10(b); and

ix. other information as required and described in the NJDEP 403 Annual Report Guidance.

x. Two copies of the Pretreatment Program Annual Report shall be submitted to the BPR in the form prescribed in that guidance. The reports shall be submitted to:
NJDEP, Mail Code - 401-02B
Bureau of Pretreatment and Residuals
401 E. State Street
P.O. Box 420
Trenton, N.J. 08625-0420.

11. CWEA Annual Report

a. The Permittee must submit information required by N.J.A.C. 7:14A-19.6(c), (d) and (e) pertaining to the implementation of the DLA's approved pretreatment program.

b. Submit the CWEA Annual Report: by February 1 of each year beginning from the next year from effective date of the permit (EDP).

c. Two copies of this report shall be submitted to:
NJDEP, Mail Code 401-02B, Bureau of Pretreatment and Residuals
401 E. State Street
P.O. Box 420
Trenton, N.J. 08625-0420.

12. Grace Period Annual Report

a. The permittee must submit the information required by N.J.A.C. 7:14A-19.6(h) and (i) pertaining to implementation of the DLA's approved pretreatment program.

b. Submit the Grace Period Annual Report: by March 1 of each year beginning from the next year from effective date of the permit (EDP).

c. Two copies of this report shall be submitted to:
NJDEP, Mail Code 401-02B, Bureau of Pretreatment and Residuals
401 E. State Street
P.O. Box 420
Trenton, N.J. 08625-0420.

G. CONDITIONS FOR MODIFICATION

1. Notification requirements

a. The permittee may request a minor modification for a reduction in monitoring frequency for a non-limited parameter when four consecutive test results of "not detected" have occurred using the specified QL.

2. Causes for modification

a. The Department may modify this permit through a minor modification in accordance with N.J.A.C. 7:14A-16.5(a)1 to eliminate monitoring for the less sensitive species upon completion of the WET characterization requirement.

b. The Department may modify or revoke and reissue any permit to incorporate 1) any applicable effluent standard or any effluent limitation, including any effluent standards or effluent limitations to control the discharge of toxic pollutants or pollutant parameters such as acute or chronic whole effluent toxicity and chemical specific toxic parameters, 2) toxicity reduction requirements, or 3) the implementation of a TMDL or watershed management plan adopted in accordance with N.J.A.C. 7:15-7.

c. The permittee may request a minor modification to eliminate the monitoring requirements associated with a discharge authorized by this permit when the discharge ceases due to changes at the facility.

d. The action taken by DRBC in establishing the CBOD20 wasteload allocation and the equivalent [BOD5 / CBOD5] mass effluent limitation was taken pursuant to Article 5 and Section 14.2 of the Delaware River Basin Compact (75 Stat. 688) and the Commission's Water Quality Regulations Section 4.30.7 which require allocating the waste assimilative capacity of the Delaware River Estuary Zones 2, 3, 4 and 5 among individual dichargers according to the doctrine of equitable apportionment. If any factor upon which an individual wasteload allocation is based change significantly, application may be made to the DRBC for reallocation. All applications will be reviewed by the Commission and, after such review, the Commission may make such reallocation as it deems necessary. Upon acceptance of a reallocation by the permittee and with the concurrence of the NJDEP, the permit will be modified in accordance with NJDEP's public notice and comment procedures, pursuant to N.J.A.C. 7:14A-16.3 and N.J.A.C. 7:14A-16.4(b)7.iii. The modified permit will include a revised CBOD20 wasteload allocation and its equivalent [C]BOD5 mass effluent limitation.

e. The Department may issue a minor modification further deferring the effective date of the acute and/or chronic whole effluent toxicity limitation if a facility is implementing the Toxicity Reduction Implementation Requirements (TRIR) in Part IV of this permit.

3. Removal or Modification of Final WQBELs or Criteria End-of-Pipe Effluent Limitations for Chemical Specific Toxic Pollutants

a. The Department will consider proposing to remove or modify a toxic pollutant's newly imposed final effluent limitation from the permit if any or all of the information in item "b" below is submitted for Departmental review and consideration.

b. Items that will be considered include, but are not limited to:

i. Submission of additional effluent data (minimum of 2.5 consecutive years of monthly data) using an approved quantification level equal to or better than the Department?s Recommended Quantification Level (RQL).

ii. Acceptable site-specific ambient data (e.g. hardness, pollutant specific data) collected in accordance with a NJDEP approved work plan.

iii. Acceptable site-specific translator values developed in accordance with a NJDEP approved work plan.

iv. Acceptable site-specific criteria developed in accordance with a NJDEP approved work plan.

v. Updated 1Q10, 7Q10, 75th percentile, and/or other appropriate stream flow values where applicable.

vi. Updated regulatory mixing zone dilution factors where applicable.

c. All studies require a NJDEP approved workplan that shall be submitted to the Department for approval on or before the effective date of the permit (EDP) + 6 months.

    i. It is recommended that all ambient monitoring associated with the establishment of hardness values, pollutant concentrations, and site specific translator values be conducted under the confines of a single work plan.

d. All final study reports and/or additional information shall be submitted to the Department on or before EDP + 36 months.

e. The Department will review all submitted information and will either propose a permit action to remove/modify the final effluent limitation(s) or deny the modification request.

APPENDIX A:

CHRONIC TOXICITY TESTING SPECIFICATIONS

FOR USE IN THE NJPDES PERMIT PROGRAM

Version 2.1

May 1997

TABLE OF CONTENTS

I. AUTHORITY AND PURPOSE

II. GENERAL CONDITIONS

- **A.** Laboratory Safety and Glassware
- **B.** Test Concentrations / Replicates
- **C.** Dilution Water
- **D.** Effluent Sample Collection
- **E.** Physical Chemical Measurements
- **F.** Statistics

III. TEST ACCEPTABILITY CRITERIA

IV. STANDARD REFERENCE TOXICANT TESTING

- **A.** Initial Testing Requirements
- **B.** Subsequent Testing Requirements
- **C.** Changing an Established Reference Toxicant
- **D.** Control Charts
- **E.** Unacceptable SRT Results
- **F.** Annual Submittals

V. TEST CANCELLATION / RESCHEDULING EVENTS

VI. REPORTING

VII. METHODS SPECIFICATIONS

- **A.** Fathead Minnow (*Pimephales promelas*), Larval Survival and Growth Test, method 1000.0
- **B.** *Ceriodaphnia dubia*, Survival and Reproduction Test, method 1002.0
- **C.** Algal, (*Selenastrum capricornutum*), Growth Test, method 1003.0
- **D.** Sheepshead Minnow (*Cyprinodon variegatus*), Larval Survival and Growth Test, method 1005.0
- **E.** Inland Silverside (*Menidia beryllina*), Larval Survival and Growth Test, method 1006.0
- **F.** *Mysidopsis bahia,* Survival, Growth, and Fecundity Test, method 1007.0
- **G**. *Champia parvula,* Sexual Reproduction Test, method 1009.0

VIII. REFERENCES

Notice: Mention of trade names or commercial products do not constitute endorsement or recommendation for use.

I. AUTHORITY AND PURPOSE

These methods specifications for the conduct of whole effluent chronic toxicity testing are established under the authority of the NJPDES permitting program, N.J.A.C. 7:14A-6.5(a)2 and 40 CFR 136, for discharges to waters of the State. The methods referenced herein are included by reference in 40 CFR 136, Table 1.A. and, therefore, constitute approved methods for chronic toxicity testing. The information contained herein serves to clarify testing requirements not sufficiently clarified in those methods documents and also serves to outline and implement the interlaboratory Standard Reference Toxicant Program until a formal laboratory certification program is established under N.J.A.C. 7:18. As such these methods are intended to be used to determine compliance with discharge permits issued under the authority of the NJPDES permit program. Tests are to be conducted in accordance with the general conditions and test organism specific method specifications contained in this document. All other conditions and specifications can be found in 40 CFR 136 and USEPA methodologies.

Until a subchapter on chronic toxicity testing within the regulations governing the certification of laboratories and environmental measurements (N.J.A.C. 7:18) becomes effective, tests shall be conducted in conformance with the methodologies as designated herein and contained in 40 CFR 136. The laboratory performing the testing shall be within the existing acute toxicity testing laboratory certification program established under N.J.A.C. 7:18, as required by N.J.A.C. 7:9B-1.5(c)5.

Testing shall be in conformance with the subchapter on chronic toxicity testing within the N.J.A.C. 7:18 when such regulations become effective. The laboratory performing the toxicity testing shall be within the chronic toxicity testing laboratory certification program to be established under that subchapter, when it becomes effective.

These methods are incorporated into discharge permits as enforceable permit conditions. Each discharge permit will specify in Part IV of the permit, the test species specific methods from this document that will be required under the terms of the discharge permit. Although the test species specific methods for each permit are determined on a case-by-case basis, the purpose of this methods document is to assure consistency among dischargers and to provide certified laboratories with information on the universe of tests to be utilized so that they can make the necessary preparations, including completing the required Standard Reference Toxicant testing. Please note that these methodologies are required for compliance testing only. Facilities and/or laboratories conducting testing under the requirements of a Toxicity Identification Evaluation or for informational purposes are not bound by these methods.

This document constitutes the second version of the NJDEP's interim chronic methodologies. This version contains no significant changes to the test methods themselves. However, in keeping with the Department's continued emphasis on good laboratory practices and quality control, the areas addressing the Standard Reference Toxicant Program, data analysis and data reporting, have been significantly revised.

II. GENERAL CONDITIONS

A. LABORATORY SAFETY, GLASSWARE, ETC.

All safety procedures, glassware cleaning procedures, etc., shall be in conformance with 40 CFR 136 and USEPA's "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms," "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms" and N.J.A.C. 7:18.

B. TEST CONCENTRATIONS / REPLICATES

All testing is to be performed with a minimum of five effluent concentrations plus a dilution water control. A second reference water control is optional when a dilution water other than culture water is used. The use of both a 0.5 or 0.75 dilution factor is acceptable for the selection of test concentrations. If hypothesis testing will be used to determine the test endpoint, one effluent concentration shall be the chronic permit limitation, unless the existing data for the discharge indicate that the NOEC is expected to be significantly less than the permit limit. The use of the 0.5 dilution factor may require more than five dilutions to cover the entire range of effluent concentrations as well as the chronic permit limit, since the permit limit will often not be one of the nominal concentrations in a 0.5 dilution series. In such an instance, the 0.5 dilution series may be altered by including an additional test concentration equal to the permit limit in the dilution series, or by changing the concentration closest to the permit toxicity limit to be equal to that limit. The Department recommends the use of the 0.75 dilution factor using Table 1.0 to determine test concentrations. That table establishes test concentrations based on the chronic toxicity limitation.

For either the 0.5 or 0.75 dilution factor, there shall be at least one test concentration above the permit limitation and at least three test concentrations below the permit limit along with the dilution water control unless the permit limitation prohibits such (e.g., limitations greater than 75% effluent). An effort shall be made to bracket the anticipated test result.

To use Table 1.0, locate the permit limit in column 4. The dilution series becomes the row that corresponds to the permit limit in column 4. For example, a permit limit of 41 would require a dilution series of the dilution water control, 17%, 23%, 31%, 41% and 55% effluent.

The number of replicates used in the test must, at a minimum, satisfy the specifications of the applicable methods contained herein. Increased data sensitivity can be obtained by increasing the number of replicates equally among test concentrations and thus an increased number of replicates is acceptable. Further, the use of nonparametric statistical analysis requires a minimum of four replicates per test concentration. If the data for any particular test is not conducive to parametric analyses and if less than four replicates were included, the test may not be considered acceptable for compliance purposes.

The use of single concentration tests consisting of the permit limitation as a concentration and a control is not permitted for compliance purposes, but may be used by a permittee in the conduct of a Toxicity Investigation Evaluation (TIE) or for information gathering purposes. Such a test would be considered a "pass" if there was no significant difference in test results, using hypothesis testing methods.

Table 1.0: 0.75 DILUTION SERIES INDEXED BY PERMIT LIMIT

				Permit Limit						Permit Limit	
Col #	1	2	3	4	5	**Col #**	1	2	3	4	5
	0.4	0.6	0.8	1	1.3		22	29	38	51	68
	0.8	1.1	1.5	2	2.7		22	29	39	52	69
	1.3	1.7	2.3	3	4		22	30	40	53	71
	1.7	2.3	3	4	5.3		23	30	41	54	72
	2.1	2.8	3.8	5	6.7		23	31	41	55	73
	2.5	3.4	4.5	6	8		24	32	42	56	75
	3	4	5	7	9		24	32	43	57	76
	3	5	6	8	11		24	33	44	58	77
	4	5	7	9	12		25	33	44	59	79
	4	6	8	10	13		25	34	45	60	80
	5	6	8	11	15		26	34	46	61	81
	5	7	9	12	16		26	35	47	62	83
	5	7	10	13	17		27	35	47	63	84
	6	8	11	14	19		27	36	48	64	85
	6	8	11	15	20		27	37	49	65	87
	7	9	12	16	21		28	37	50	66	88
	7	10	13	17	23		28	38	50	67	89
	8	10	14	18	24		29	38	51	68	91
	8	11	14	19	25		29	39	52	69	92
	8	11	15	20	27		30	39	53	70	93
	9	12	16	21	28		30	40	53	71	95
	9	12	17	22	29		30	41	54	72	96
	10	13	17	23	31		31	41	55	73	97
	10	14	18	24	32		31	42	56	74	99
	11	14	19	25	33		32	42	56	75	100
	11	15	20	26	35	24	32	43	57	76	
	11	15	20	27	36	24	32	43	58	77	
	12	16	21	28	37	25	33	44	59	78	
	12	16	22	29	39	25	33	44	59	79	
	13	17	23	30	40	25	34	45	60	80	
	13	17	23	31	41	26	34	46	61	81	
	14	18	24	32	43	26	35	46	62	82	
	14	19	25	33	44	26	35	47	62	83	
	14	19	26	34	45	27	35	47	63	84	
	15	20	26	35	47	27	36	48	64	85	
	15	20	27	36	48	27	36	48	65	86	
	16	21	28	37	49	28	37	49	65	87	
	16	21	29	38	51	28	37	50	66	88	
	16	22	29	39	52	28	38	50	67	89	
	17	23	30	40	53	28	38	51	68	90	
	17	23	31	41	55	29	38	51	68	91	
	18	24	32	42	56	29	39	52	69	92	
	18	24	32	43	57	29	39	52	70	93	
	19	25	33	44	59	30	40	53	71	94	
	19	25	34	45	60	30	40	53	71	95	
	19	26	35	46	61	30	41	54	72	96	
	20	26	35	47	63	31	41	55	73	97	
	20	27	36	48	64	31	41	55	74	98	
	21	28	37	49	65	31	42	56	74	99	
	21	28	38	50	67	32	42	56	75	100	

* Select the dilution series by finding the row which contains the permit limit in column #4.
NOTE: All values are in units of "% effluent" not toxic units.

C. DILUTION WATER

1. Marine and Estuarine Waters

A high quality natural water, such as the Manasquan River Inlet is strongly recommended as the dilution water source for chronic toxicity testing with marine and estuarine organisms. The use of the receiving water as the dilution water source is not required. Saline waters prepared with hypersaline brine and deionized water may also be used as dilution water. Hypersaline brines shall be prepared from a high quality natural seawater and shall not exceed a concentration of 100 ppt. The type of a dilution water for a permittee may not be changed without the prior approval of the Department.

The standard test salinity shall be 25 ppt, except for *Champia parvula,* which shall be tested at 30 ppt. Since most effluents are freshwater based, in most cases it will be necessary to adjust the salinity of the test concentrations to the standard test salinity.

2. Fresh Waters

A high quality natural water, such as Round Valley Reservoir (if access is allowed) or Lake Hopatcong, is strongly recommended as the dilution water source for chronic toxicity testing with freshwater organisms. It is not required to perform the toxicity testing with the receiving water as dilution water. Tests performed with a reconstituted water or up to 20% Diluted Mineral Water (DMW) as dilution water is acceptable. For testing with *Ceriodaphnia dubia*, the addition of 5 µg/l selenium (2 µg/l selenium with natural water) and 1 µg/l vitamin B12 is recommended (Keating and Dagbusan, 1984: Keating, 1985 and 1988). The source of a dilution water for a permittee may not be changed without the prior approval of the Department. Reconstituted water and DMW should be prepared with Millipore Super Q^{R} or equivalent, meet the requirements of N.J.A.C. 7:18-6 and should be aerated a minimum of 24 hrs prior to use, but not supersaturated.

D. EFFLUENT SAMPLE COLLECTION

Effluent samples shall be representative of the discharge being regulated. For each discharge serial number (DSN), the effluent sampling location shall be the same as that specified in the NJPDES permit for other sampling parameters unless an alternate sampling point is specified in the NJPDES discharge permit. For industrial dischargers with a combined process/sanitary waste stream, effluent sampling shall be after chlorination, unless otherwise designated in the permit.

For continuous discharges, effluent sampling shall consist of 24 hour composite samples consisting either of equal volumes taken once every hour or of a flow-proportionate composite sample, unless otherwise approved by the Department. At a minimum, three samples shall be collected as specified above, one every other day. The first sample shall be used for test initiation and the first renewal. The second sample for the next two renewals. The third sample shall be used for the final three renewals. For the *Champia* and *Selenastrum* tests, a single sample shall be collected not more than 24 hours prior to test initiation. No effluent sample shall be over 72 hours old at the time of its use to initiate or renew solutions in a test. It is acceptable to collect samples more frequently for chronic WET testing and if samples are collected daily for acute toxicity testing conducted concurrently, available samples may be used to renew the test solutions as appropriate.

For all other types of discharges, effluent sampling shall be conducted according to specifications contained within the discharge permit, methodology questionnaire or as otherwise specified by the Department. The use of grab samples or other special sampling procedures will be based on time of occurrence and duration of intermittent discharge events.

If a municipal discharger has concerns that the concentrations of ammonia and/or chlorine in an effluent are adequate to cause violations of the permit limit for chronic toxicity testing, the permittee should conduct analyses, as specified in USEPA's toxicity investigation methods documents, to illustrate the relationship between chronic effluent toxicity and chlorine and/or ammonia as applicable. This data may then be submitted

to the Department as justification for a request to use modified test procedures, which account for ammonia and/or chlorine toxicity, in future chronic toxicity tests. The Department may, where adequate justification exists, permit the adjustment of these pollutants in the effluent sample if discharge limits for these pollutants are contained in the NJPDES permit and those permit limitations are adequate for the protection of water quality. Any proposed modified test procedures to adjust effluent chlorine and/or ammonia shall be approved by the Department prior to use of those test procedures for any compliance testing.

Except for filtration through a 2 mm or larger screen or an adjustment to the standard test salinity, no other adjustments to the effluent sample shall be made without prior written approval by the Department. Aeration of samples prior to test start shall be minimized where possible and samples shall not be aerated where adequate saturation exists to maintain dissolved oxygen.

E. PHYSICAL CHEMICAL MEASUREMENTS

At a minimum, the physical chemical measurements shall be as follows:

- pH and dissolved oxygen shall be measured at the beginning and end of each 24 hour exposure period, in at least one chamber, of the high, medium and low test concentrations and the control. In order to ensure that measurements for these parameters are representative of the test concentrations during the test, measurements for these parameters should be taken in an additional replicate chamber for such concentrations which contains no test organisms, but is subject to the same test conditions.

- Temperature shall either be monitored continuously, measured daily in at least two locations in the environmental control system, or measured at the beginning of each 24 hr exposure period in at least one replicate for each treatment.

- Salinity shall be measured in all salt water tests at the beginning of each 24 hour exposure period, in at least one replicate for each treatment.

- For all freshwater tests, alkalinity, hardness and conductivity shall be measured in each new sample (100% effluent) and control.

- Nitrite, nitrate and ammonia shall be measured in the control before each renewal in the mysid test only.

- For samples of discharges where concentrations of ammonia and/or chlorine are known or are suspected to be sufficient to cause toxicity, it is recommended that the concentrations of these pollutants be determined and submitted with the standardized report form. The laboratory is advised to consult with the permittee to determine if these parameters should be measured in the effluent. Where such measurements are deemed appropriate, measurements shall be conducted at the beginning of each 24 hour exposure period. Also, since a rise in the test pH can affect the toxicity of ammonia in the effluent, analysis of ammonia during the test may be appropriate if a rise in pH is accompanied by a significant increase in mortality.

F. STATISTICS

The use of both hypothesis testing techniques and point estimate techniques are currently in use by the Department or by permittees for compliance purposes. The NJPDES permit should be checked to determine which type of analysis is required and appropriate for each specific facility. It is not acceptable to simply evaluate any data by "visual data review" unless in the analysis of survival data, no mortality occurred in the test. All data sets must be appropriately statistically evaluated.

For hypothesis testing techniques, statistical analysis shall follow the protocols in USEPA (1988, 1989) to evaluate adverse effects. A significance level of 0.05 shall be utilized to evaluate such effects. Use of a protocol not contained in these documents must be accompanied by a reference and explanation addressing its

applicability to the particular data set. Please note the following when evaluating data using hypothesis testing techniques.

Special attention should be given to the omission and inclusion of a given replicate in the analysis of mysid fecundity data (USEPA 1994, p. 275) and *Ceriodaphnia* reproduction data (USEPA 1994, page 174).

Determination of acceptability criteria and average individual dry weight for the growth endpoints must follow the specifications in the applicable documents (e.g., p.84 for saltwater methods document.)

Use of nonparametric statistical analyses requires a minimum of four replicates per test concentration. If the data for any particular test are not conducive to parametric analyses and if less than four replicates were included, the test may not be acceptable to the Department.

Where hypothesis testing is used for compliance purposes, if the results of hypothesis testing indicate that a deviation from the dose response occurs such that two test concentrations are deemed statistically significant from the control but an intermediate test concentration is not, the test is deemed unacceptable and cannot be used for compliance testing purposes.

For point estimate techniques, statistical analysis should follow the protocol contained in "A Linear Interpolation Method for Sublethal Toxicity: The Inhibition Concentration (ICp) Approach (Version 2.0), July 1993, National Effluent Toxicity Assessment Center Technical Report 03-93." Copies of the program can be obtained by contacting the Department. The linear interpolation estimate ICp values and not the bootstrap mean ICp, shall be reported for permit compliance purposes. The ICp value reported on the Discharge Monitoring Report shall be rounded off as specified in the Department's "Discharge Monitoring Report (DMR) Instruction Manual, December 1993." IC25 values shall be reported under the parameter code listed as "NOEC" on the DMR, until the DMR's are adjusted accordingly.

If the result reported by the ICp method is greater than the highest concentration tested, the test result is reported as "greater than C" where "C" is the highest tested concentration. If the ICp is lower than the lowest concentration tested, the test result is reported as "less than C" where "C" is the lowest tested concentration.

If separate NOEC's/IC25's can be calculated from multiple test endpoints, for example a reproductive endpoint and a growth endpoint, the lowest NOEC/IC25 value expressed in units of "% effluent" will be used to determine permit compliance and should, therefore, be reported as the NOEC/IC25 value for the test. If the NOEC value for growth and/or reproduction is not lower than that for survival, the NOEC/IC25 value reported for the test shall be as survival. For saltwater tests, where additional controls are used in a test (i.e. brine and/or artificial sea salt control), a T-test shall be used to determine if there is a significant difference between the original test control and the additional controls. If there is a significant difference between any of the controls, the test may be deemed unacceptable and if so, will not be used for permit compliance.

III. TEST ACCEPTABILITY CRITERIA

Any test that does not meet these acceptability criteria will not be used by the Department for any purpose and must be repeated as soon as practicable, with a freshly collected sample.

1. Tests must be performed by a laboratory approved for the conduct of chronic toxicity tests and certified for acute toxicity testing under N.J.A.C. 7:18.

2. Test results may be rejected due to inappropriate sampling, including the use of less than three effluent samples in a test and/or use of procedures not specified in a permit or methodology questionnaire, use of frozen or unrefrigerated samples or unapproved pretreatment of an effluent sample.

3. Controls shall meet the applicable performance criteria specified in the Table 2.0 and in the individual method specifications contained herein.

4. Acceptable and applicable Standard Reference Toxicant Data must be available for the test.

5. No unapproved deviations from the applicable test methodology may be present.

6. When using hypothesis testing techniques, a deviation from the dose response as explained in the statistical portion of this document shall not be present in the data.

Table 2.0: CONTROL PERFORMANCE

TEST ORGANISM	MINIMUM SURVIVAL	MINIMUM WEIGHT GAIN	MINIMUM FECUNDITY/ REPRODUCTION
Pimephales promelas	80%	0.25 mg avg	N/A
Ceriodaphnia dubia	80%	N/A	Average of $\geq$15 young per surviving female
Selenastrum capricornutum	Density $\geq 2x10^5$cells/ml	N/A	Variability in controls not to exceed 20%.
Cyprinodon variegatus	80%	0.60 mg (unpreserved) avg 0.50 mg (preserved) avg	N/A
Menidia beryllina	80%	0.50 mg (unpreserved) avg 0.43 mg (preserved) avg	N/A
Mysidopsis bahia	80%	0.2 mg per mysid avg	egg production by 50% of control females if fecundity is used as an endpoint.
Champia parvula	100%	N/A	$\geq$10 cystocarps per plant Plants in controls and lower test concentrations shall not fragment so that individual plants cannot be identified.

THE DETERMINATION OF A TEST AS UNACCEPTABLE DOES NOT RELIEVE THE FACILITY FROM MONITORING FOR THAT MONITORING PERIOD

IV. STANDARD REFERENCE TOXICANT TESTING

All chronic testing shall be accompanied by testing with a Standard Reference Toxicant (SRT) as a part of each laboratory's internal quality control program. Such a testing program should be consistent with the quality assurance/quality control protocols described in the USEPA chronic testing manuals. Laboratories may utilize the reference toxicant of their choice and toxicants such as cadmium chloride, potassium chloride, sodium dodecyl sulfate and copper sulfate are all acceptable. However, Potassium chloride has been chosen by several laboratories and is recommended by the Department. The concentration of the reference toxicant shall be verified by chemical analysis in the low and high test concentrations once each year or every 12 tests, whichever is less. It is not necessary to run SRT tests, for all species using the same SRT.

A. INITIAL STANDARD REFERENCE TOXICANT (SRT) TESTING REQUIREMENTS

At a minimum, this testing shall include an initial series of at least five SRT tests for each test species method. Acceptable SRT testing for chronic toxicity shall be performed utilizing the short term chronic toxicity test methods as specified herein. Reference toxicant tests utilizing acute toxicity testing methods, or any method other than those contained in this document are not acceptable. The laboratory should forward results of the initial SRT testing, including control charts, the name of the reference toxicant utilized, the supplier and appropriate chemical analysis of the toxicant to either address listed in the reporting requirements section herein. The initial series of a least five SRT tests for a specific test species method shall be completed and approved in writing by the Department prior to the conduct of any chronic toxicity testing for compliance purposes.

B. SUBSEQUENT SRT TESTING REQUIREMENTS

After receiving the initial approval from the Department to conduct chronic toxicity tests for compliance purposes, subsequent SRT testing shall be conducted as follows:

1. Where organisms used in testing are cultured at the testing laboratory, SRT testing should be conducted once per month for each species/method.

2. Where the laboratory purchases organisms from a laboratory certified in New Jersey for the conduct of acute toxicity testing and approved for the conduct of chronic toxicity testing for the test organism in question (i.e. the "supplier laboratory"), SRT data provided by the "supplier laboratory" for each lot of organisms purchased is acceptable as long as the SRT test result falls within the control limits of the control chart established by the "supplier laboratory" for that organism. The laboratory using purchased organisms is responsible for the results of any compliance tests they perform.

3. A testing laboratory purchasing organisms from a supplier laboratory must still perform SRT testing on a quarterly basis at a minimum, for each species they test with, in order to adequately document their own interlaboratory precision.

4. If a testing laboratory purchasing organisms elects not to use the SRT data from a "supplier laboratory" or such data is unavailable or where organisms are purchased from another organism supplier, the testing laboratory must conduct SRT testing on each lot of organisms purchased.

5. For industrial laboratories certified under N.J.A.C. 7:18 to conduct acute toxicity tests, only the SRT testing conditions specified in 2. through 4. above apply. Where that laboratory/facility cultures their own test organisms, the frequency of SRT testing required will be determined on a case by case basis, based on the frequency of testing for that facility.

NOTE: Based on these requirements, SRT data are considered applicable to a compliance test when the SRT test results are acceptable and the SRT test is conducted within 30 days of the compliance test, for the test species and SRT in question. Therefore, it is not necessary for an approved laboratory to run an SRT test every month if the laboratory is not conducting compliance tests for a particular species.

C. CHANGING OF AN ESTABLISHED REFERENCE TOXICANT

The SRT used for any species by a laboratory may be changed at any time provided that the following conditions have been satisfied:

1. A series of at least three reference toxicant tests are conducted with the new reference toxicant and the results of those tests are identified as satisfactory, in writing, by the Department.

2. Laboratories must continue using the already approved SRT in their ongoing QA/QC program, until such time as the letter referenced above, is received by the laboratory.

D. CONTROL CHARTS

Control charts shall be established from SRT test results in accordance with the procedures outlined in the USEPA methods documents. Control charts shall be constructed using IC25's using the following methods:

1. The upper and lower control limits shall be calculated by determining +/- two standard deviations above and below the mean.

2. SRT test results which exhibit an IC25 that is greater than the highest concentration tested or less than the lowest concentration tested (i.e. a definitive endpoint cannot be determined), shall not be used to establish control charts.

3. SRT tests which do not meet the acceptability criteria for a specific species shall not be used to establish control charts.

4. All values used in the control charts should be as nominal concentrations. However, the control charts shall be accompanied by a chart tabulating the test results as measured concentrations.

5. An outlier (i.e. values which fall outside the upper and lower control limits) should be included on the control chart unless it is determined that the outlier was caused by factors not directly related to the test organisms (e.g., test concentration preparation) as the source of variability would not be directly applicable to effluent tests. In such case, the result and explanation shall be reported to the Department within 30 days of the completion of the SRT test.

The control chart established for the initial series of SRT data submitted will be used by the laboratory and the Department to determine outliers from SRT test results reported in the "NJPDES Biomonitoring Report Form - Chronic Toxicity Test" submitted by the permittees for the test species. These initial control limits will remain unchanged until twenty SRT tests have been completed by the laboratory.

The following procedures shall be used for continually updating control charts after twenty acceptable SRT tests have been completed:

1. Once a laboratory has completed twenty acceptable SRT tests for a test species, the upper and lower control limits shall be recalculated with those twenty values.

2. For each successive SRT test conducted after these first twenty tests, a moving average shall be calculated and the control limits reevaluated using the last twenty consecutive test results.

3. The upper and lower control limits shall be reported on the "NJPDES Biomonitoring Report Form - Chronic Toxicity Tests" along with the SRT test result.

E. UNACCEPTABLE SRT TEST RESULTS

If a laboratory produces any SRT test results which are outside the established upper and lower control limits for a test species at a frequency greater than one test in any ten tests, a report shall be forwarded to the Department at the address contained herein. This report shall include any identified problem which caused the values to fall outside the expected range and the corresponding actions that have been taken by the laboratory. The Department may not accept or may require repeat testing for any toxicity testing that may have been affected by such an occurrence.

If a laboratory produces two consecutive SRT test results or three out of any ten test results which are outside the established upper and lower limits for a specific test species, the laboratory shall be unapproved to conduct chronic toxicity tests for compliance purposes for that test species. Reapproval shall be contingent upon the laboratory producing SRT test results within the established upper and lower control limits for that test species in two consecutive SRT tests. If one or both of those test results again fall outside the established control levels, the laboratory is unapproved for that test species until five consecutive test results within the established upper and lower control limits are submitted and approved by the Department.

F. ANNUAL SUBMITTALS

Control charts shall be forwarded to the Department on an annual basis, on the anniversary of approval for the test species.

The Department may request, at any time, any information which is essential in the evaluation of SRT results and/or compliance data.

V. TEST CANCELLATION / RESCHEDULING EVENTS

A lab may become aware of QA problems during or immediately following a test that will prevent data from being submitted or a lab may be unable to complete a tests due to sample collection or shipping problems. If for any reason a chronic toxicity test is initiated and then prematurely ended by the laboratory or at the request of the permittee, the laboratory shall submit the form entitled "Chronic Whole Effluent Toxicity Testing Test Cancellation / Rescheduling Event Form" contained herein. This form shall be used to detail the reason for prematurely ending the test. This completed form and any applicable raw data sheets shall be submitted to the appropriate biomonitoring program at the address above within 30 days of the cessation of the test.

Tests are considered to be initiated once test organisms have been added to all test chambers.

Submission of this form does not relieve the facility from monitoring for that monitoring period.

VI. REPORTING

The report form entitled "NJPDES Biomonitoring Report Form - Chronic Toxicity Tests" should be used to report the results of all NJPDES chronic compliance biomonitoring tests. Laboratory facsimiles are acceptable but must contain all information included on any recent revisions of the form by the Department. Statistical printouts and raw data sheets for all endpoints analyzed shall be included with the report submitted to the Department. Two copies of all chronic toxicity test report forms shall be submitted to the following address as applicable:

Bureau of Surface Water Permitting
New Jersey Department of Environmental Protection
Division of Water Quality
PO Box 420
Trenton, NJ 08625-0420

It is not necessary to attach a copy of a test report form to the Discharge Monitoring Report (DMR) form when submitting this form to the Department. However, the results of all chronic toxicity tests conducted for compliance purposes must be reported on the DMR form under the appropriate parameter code in the monitoring period in which the test was conducted.

VII. METHOD SPECIFICATIONS

The following method specifications shall be followed as specified in the NJPDES permit. Any changes to these methods will not be considered acceptable unless they are approved in writing by the Department, prior to their use.

A. Fathead Minnow (*Pimephales promelas*), Larval Survival and Growth Test, method 1000.0
B. *Ceriodaphnia dubia*, Survival and Reproduction Test, method 1002.0
C. Algal, (*Selenastrum capricornutum*), Growth Test, method 1003.0
D. Sheepshead Minnow (*Cyprinodon variegatus*), Larval Survival and Growth Test, method 1005.0
E. Inland Silverside (*Menidia beryllina*), Larval Survival and Growth Test, method 1006.0
F. *Mysidopsis bahia*, Survival, Growth, and Fecundity Test, method 1007.0
G. *Champia parvula*, Sexual Reproduction Test, method 1009.0

VIII. REFERENCES

1. Keating, K. 1985. The influence of Vitamin B12 deficiency on the reproduction of Daphnia pulex Leydig (Cladocera). J. Crustacean Biology 5:130-136.

2. Keating, K. 1988. N.J.D.E.P. Project C29589, Fiscal 1988 Third Quarter Summary Report. Producing Nutritionally Competent Daphnids for Use in Bioassay. 44p.

3. Keating, K., and B. Dagbusan. 1984. Effect of selenium deficiency on cuticle integrity in Cladocera (Crustacea). Proc. Natl. Acad. Sci. USA 81:3433-3437.

4. NJDEP, 1993. Discharge Monitoring Report (DMR) Instruction Manual.

5. USEPA. 1994. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms. EPA-600/4-91-003. July 1994. Second Edition.

6. USEPA. 1994. Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms. EPA/600/4-91/002. July 1994. Third Edition.

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
PO Box 420
TRENTON, NEW JERSEY 08625-0420
BIOMONITORING PROGRAM

CHRONIC WHOLE EFFLUENT TOXICITY TESTING
TEST CANCELLATION / RESCHEDULING EVENT FORM

THIS FORM IS TO BE COMPLETED AND SUBMITTED TO THE DEPARTMENT DIRECTLY BY THE LABORATORY CONDUCTING CHRONIC TOXICITY TESTS WHENEVER A CHRONIC TOXICITY TEST IS PREMATURELY ENDED FOR ANY REASON

NJPDES No.: _____

FACILITY NAME: _____

LOCATION: _____

CONTACT: _____ PHONE: _____

CANCELLATION EVENT:

LABORATORY NAME / NUMBER: _____

CONTACT: _____

TEST START DATE: _____/_____/_____ TEST END DATE: _____/_____/_____

REASON FOR CANCELLATION: _____

_____

_____

_____

_____

_____

EFFLUENT SAMPLING:

SAMPLING POINT / DESCRIPTION OF SAMPLING SITE: _____

_____

SAMPLING INITIATED: DATE: ____/____/____ TIME: _____

SAMPLING ENDED: DATE: ____/____/____ TIME: _____

NUMBER OF EFFLUENT SAMPLES COLLECTED: _____

SAMPLE TYPE (GRAB/COMPOSITE): _____

RECEIVED IN LAB BY/FROM: _____

_____

METHOD OF SHIPMENT: _____

(ALL APPLICABLE RAW DATA SHEETS MUST BE ATTACHED)

c: Permittees authorized agent.

Masterfile #: 13564 **PI #:** 46854

RWBR Approval Status List

The permittee is only authorized to utilize RWBR for the specific category, type and location that has been approved in the table below.

RWBR Category	Specific RWBR Type	Location	Status
PA	Spray Irrigation (Golf Course)	None	Not Approved
PA	Spray Irrigation (Athletic Fields, Playgrounds)	None	Not Approved
PA	Spray Irrigation (Residential Lawns)	None	Not Approved
PA	Vehicle Washing	None	Not Approved
PA	Hydroseeding/Fertilizing	None	Not Approved
PA	Decorative Fountains	None	Not Approved
PA	Toilet Flushing	None	Not Approved
RA-LA	Sod Irrigation	None	Not Approved
RA-LA	Spray Irrigation within a fenced perimeter or otherwise restricted area	None	Not Approved
RA-LA	Spray Irrigation within a fenced perimeter or otherwise restricted area (Without NH3 + NO3)	None	Not Approved
RA-LA	Spray Irrigation (not fenced or restricted area)	None	Not Approved
RA-CM	Street Sweeping	None	Not Approved
RA-CM	Dust Control	None	Not Approved
RA-CM	Fire Protection	None	Not Approved
RA-CM	Vehicle Washing (at STP or DPW)	None	Not Approved
RA-CM	Composting	None	Not Approved
RA-IS	Sanitary Sewer Jetting	MUA Sewer Service Area	Approved
RA-IS	Non-Contact Cooling Water	None	Not Approved
RA-IS	Boiler Makeup Water	None/Name and Location	Not Approved
RA-IS	Road Milling	None	Not Approved
RA-IS	Hydrostatic Testing	None/User Name	Not Approved
RA-IS	Parts Washing	None/Name and Location	Not Approved
RA-IS	STP Washdown	Rockaway Valley Sa	Approved

Categories:

PA	Public Access
RA-LA	Restricted Access-Land Application and Non-Edible Crops
RA-CM	Restricted Access--Construction and Maintenance Operations
RA-IS	Restricted Access--Industrial Systems

Abbreviations:

NH3 -	Ammonia
NO3 -	Nitrate
STP -	Sewage Treatment Plant
DPW -	Dept. of Public Works

Annual Reuse Report

Any facility that has received an RWBR authorization is required to submit an Annual Reuse Report. The following information, at a minimum, shall be included in the report, due on February 1st of each year.

(1) The total wastewater reused (R) by the facility in the previous calendar year. If no wastewater was reused in the previous calendar year, report R as zero and skip to (6) below;

R = _____ gallons

(2) The total wastewater discharged (D) by the facility in the previous calendar year;

D = _____ gallons

(3) The percent of wastewater reused (%R) by the facility in the previous calendar year, calculated as follows:

%R = R/(R+D), expressed as a percent;

%R = _____ percent

(4) The total wastewater that was reused for **each reuse type** in the previous calendar year. This information should be provided in the chart format utilized in the RWBR Usage Table below;

RWBR Usage Table

RWBR Category	Specific RWBR Type	Location	Flow (gallons)

Attach additional pages as necessary.

(5) An update to the correlation between Total Suspended Solids and Turbidity, if necessary;

Correlation = _____

(6) Submit a completed copy of this form to:

For paper copies:
Mail Code 401 – 02B
Division of Water Quality
Bureau of Surface Water Permitting
P.O. Box 420
Trenton, NJ 08625-0420

For electronic copies:
ben.manhas@dep.state.nj.us

Annual Reuse Report - SAMPLE

Any facility that has received an RWBR authorization is required to submit an Annual Reuse Report. The following information, at a minimum, shall be included in the report, due on February 1st of each year.

(1) The total wastewater reused (R) by the facility in the previous calendar year. If no wastewater was reused in the previous calendar year, report R as zero and skip to (6) below;

R = _____ gallons

(2) The total wastewater discharged (D) by the facility in the previous calendar year;

D = _____ gallons

(3) The percent of wastewater reused (%R) by the facility in the previous calendar year, calculated as follows:

%R = R/(R+D), expressed as a percent;

%R = _____ percent

(4) The total wastewater that was reused for **each reuse type** in the previous calendar year. This information should be provided in the chart format utilized in the RWBR Usage Table below;

RWBR Usage Table

RWBR Category	Specific RWBR Type	Location	Flow (gallons)
	For Example:		
RA-CM	*Street Sweeping*	*Local Township*	*42,000*
RA-IS	*Sanitary Sewer Jetting*	*Facility Sewer Service Area*	*15,000*
RA-IS	*STP Washdown*	*Sewage Treatment Plant*	*43,000*
		Grand Total (R)	*100,000*

Attach additional pages as necessary.

(5) An update to the correlation between Total Suspended Solids and Turbidity, if necessary;

Correlation = _____

(6) Submit a completed copy of this form to:

For paper copies:
Mail Code 401 – 02B
Division of Water Quality
Bureau of Surface Water Permitting
P.O. Box 420
Trenton, NJ 08625-0420

For electronic copies:
ben.manhas@dep.state.nj.us